

Educating the Young Child 18

Advances in Theory and Research, Implications for Practice

Jyotsna Pattnaik

Mary Renck Jalongo *Editors*

The Impact of COVID-19 on Early Childhood Education and Care

International Perspectives, Challenges,
and Responses



Springer

Educating the Young Child

Advances in Theory and Research, Implications for Practice

Volume 18

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This academic and scholarly book series will focus on the education and development of young children from infancy through eight years of age. The series will provide a synthesis of current theory and research on trends, issues, controversies, and challenges in the early childhood field and examine implications for practice. One hallmark of the series will be comprehensive reviews of research on a variety of topics with particular relevance for early childhood educators worldwide. The mission of the series is to enrich and enlarge early childhood educators' knowledge, enhance their professional development, and reassert the importance of early childhood education to the international community. The audience for the series includes college students, teachers of young children, college and university faculty, and professionals from fields other than education who are unified by their commitment to the care and education of young children. In many ways, the proposed series is an outgrowth of the success of *Early Childhood Education Journal* which has grown from a quarterly magazine to a respected and international professional journal that is published six times a year.

Please contact Astrid Noordermeer at Astrid.Noordermeer@springer.com to submit a book proposal for the series.

Jyotsna Pattnaik • Mary Renck Jalongo
Editors

The Impact of COVID-19 on Early Childhood Education and Care

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and Responses

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Part I
COVID-19 and the Global Early Childhood
Landscape

Chapter 1

Introduction to the Volume



Mary Renck Jalongo

Shortly after the lockdown was lifted in our area, a young mother ventured out with her toddler daughter to purchase essential items. Both were wearing masks and, rather than placing the child in the seat of the grocery cart, the mother held her child close while scanning her surroundings for any encroachment on the recommended physical distance boundaries. When another shopper ignored the directional arrows on the floor and approached them head on, a look of panic swept over the mother's face. She raced over to a different aisle with the child bouncing along as she ran. Then the toddler put up her hands, palms out, and fingers spread, as if warding away a threat. Imagine the contrast between this experience and a pre-pandemic trip to the grocery store. Previous visits surely would have been more relaxed, with the toddler taking in sights, smells, and using her emerging vocabulary. Her mother probably would have exchanged smiles and nods with fellow shoppers. Now, thanks to COVID, an ordinary errand had become an anxiety-ridden venture into a danger zone, teeming with possibilities for infection, disease, and even death.

The COVID-19 pandemic is a disaster of the first order, and the disease persists despite monumental efforts to eradicate it. A Centers for Disease Control-led team calculated that, for every four COVID-19-associated deaths in the United States, a child loses a parent or a caregiver (Hillis et al., 2021b). Such losses can be particularly acute for the very young because separation and abandonment are major fears during early childhood. COVID-19 has not only intensified that worry but also, in an alarming number of instances, made it a reality. A study published in *The Lancet* estimated that, throughout the world, 1,562,000 children have experienced the death of at least one primary or secondary caregiver (Hillis et al., 2021a).

The children of racial and ethnic minorities and indigenous people have been disproportionately affected (Hillis et al., 2021b; Xafis, 2020). To illustrate, the

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National Center for Health Statistics data indicated that 65% of children of racial and ethnic minorities lost a primary caregiver, even though they represent only 39% of the total US population (Haseltine, 2021). Hispanic, Black, and American Indian/Alaska Native children accounted for over 50–67% of those losing a parent or primary caregiver to COVID-19 in different regions in the United States even though they represent minority groups (Haseltine, 2021).

Other types of loss have compounded the problem. Countries with widespread poverty and fragile education systems failed to stabilize the existing educational programs, much less innovate toward greater equity (Soudien et al., 2022). The United Nations (2020a) and Organisation for Economic Co-operation and Development (OECD, 2020) report that more than 1.7 billion learners had their learning disrupted or even discontinued, and 99% of students in low- and middle-income countries experienced constrained educational opportunities. Even within European countries, childcare policies and responses to COVID-19 differed considerably (Blum & Dobrotić, 2020). Measures instituted to address the transmission of the virus, while necessary, have tended to increase the psychological vulnerability of children in general and further exacerbated the situation for children who were already experiencing poverty, food insecurity, abuse, neglect and maltreatment, anxiety and depression, and fewer educational opportunities to learn (Fegert et al., 2020; Fry-Bowers, 2020). For example, even in a wealthy nation such as the United States, the provision of food to 4.6 million young children from low-income backgrounds in early care and education settings faltered because most programs did not have the capacity to distribute the food, causing that “safety net” to unravel (Bauer et al., 2021).

As the United Nations (2020b) has cogently argued, COVID-19 is not only a health disaster; it is also a humanitarian crisis. To illustrate, many are aware of the disturbing demographic data that documented higher rates of infection with COVID-19 among minorities and marginalized groups than in the general US population. What is less fully appreciated is that those same inequities were played out in the early childhood sector, particularly childcare.

In the United States, nearly 2/3 of families with children between the ages of infancy and 5 years rely on early childhood education and care (USA Facts, 2020). A report from the Urban Society (Adams et al., 2021) defines the “childcare/early education workforce” as center-based staff (including directors, teachers, and aides) and family child care and home-based providers. Childcare workers are 2.5 times more likely to be either Black or Latina compared with the overall workforce (Austin et al., 2019). They also were more likely to test positive for COVID-19 (Gillam et al., 2020). Globally speaking, those employed as caregivers and educators of young children often are poorly compensated and/or without health insurance, yet many persisted at high risk to their own health and that of their families. Without the childcare/early education workforce’s support of essential workers, health care and the economy in many nations could have collapsed (Tracey et al., 2020). They were placed in the position of just “holding on until help comes” (National Association for the Education of Young Children, 2020), and, evidently, some of them could not prevail. In the United States alone, more than 370,000 childcare and early education

workers exited the field from February to April of 2020 and, as of December 2020, the workforce had been reduced by 17% (Bureau of Labor Statistics, 2021). The glib solution of “going online” proffered to those in other occupations or even for other groups of educators was totally inaccessible to them because their primary role consisted of in-person care for the youngest children. To make their role even more difficult, the very young children in their care seldom understood the changes instituted or the underlying reasons for them (Adams et al., 2021). Childcare personnel who remained also had to find a way to deal with stringent health and safety protocols, staff shortages, unpredictable enrolments, increased operating budgets, and fiscal uncertainty (Workman & Jessen-Howard, 2020). Any pre-existing bad situations with a few or no options for safe, reliable, and affordable early childhood care and education continued to worsen in the pandemic’s wake (Kalluri et al., 2021).

Of course, early childhood educators affiliated with public schools faced challenges as well. They were expected to quickly adjust their personal lives and home environments to the circumstances, implement new health and safety protocols, transition to emergency remote teaching, link children and families to needed services and supports, work differently with families, and implement plans for reopening—to name a few (Atiles et al., 2021).

College and university faculty members found that growing numbers of their students were understandably worried not only about the virus but also about program completion and future job prospects. Enrollment declined at many higher education institutions and, if they had been struggling financially pre-pandemic, they were now in crisis. In many instances, faculty members with the fewest resources for weathering the COVID-19 pandemic—part-timers, temporaries, and those at the bottom of the seniority list—lost their jobs. Meanwhile, some of the most senior faculty took early retirement rather than completely reconfigure their professional lives, leaving their areas of specialization uncovered and further compounding staffing problems. Working with undergraduates or graduate students, faculty members’ instruction, advisement, assessment, and field supervision had to be transformed to online formats almost overnight. Designing meaningful practicum experiences for students demanded resourcefulness, collaboration with colleagues, and new ways of working with schools. Throughout it all, members of the female-dominated field of early childhood education and care saw their household duties increase and, if they were responsible for children, the expectations for learning support at home increased exponentially. Across the entire spectrum of early childhood education and care, ranging from infant-toddler programs to post-doctoral studies, professionals confronted huge and sometimes overwhelming demands to adapt.

In the early days of the coronavirus, we had no idea about the professional and personal stress and trauma that the disease would wreak for practically everyone. Some of us associated with this project lost family, colleagues, students, friends, and community members to COVID, both temporarily and permanently. We (mostly) expected that a cure would be found and that the illness would be eradicated. Instead, at the time of this writing, we are seeing the virus mutate, persist, and break

through—in some cases, even among people who were vaccinated. Will “The COVID,” as many people now refer to it, ever be put to rest, once and for all, and in the meantime, what will humankind have to endure? More than a year later, the answers remain unclear.

About the Book Project

When Jyotsna Pattnaik first proposed an edited book on the topic, my initial reaction was that we did not yet know what the effects of COVID-19 might be. I suggested that we begin with a special issue of *Early Childhood Education Journal* because it could be produced more quickly than a book, gauge readers’ interest in the subject matter, and perhaps identify contributors of the chapters. Patricia Crawford, editor-in-chief of *ECEJ*, and our publisher Springer Nature responded promptly to the proposal for a special issue. In the spring and summer of 2020, the first manuscripts were submitted. Ultimately, 22 articles devoted to the topic of COVID-19’s impact on early childhood education and care (ECEC) were published in the September of 2021 (volume 49, number 5) issue of the *Early Childhood Education Journal*. In keeping with their enlightened policies, Springer Nature decided to make all publications about COVID-19 Open Access and free of charge. To date, articles from the special issue of *Early Childhood Education Journal* on COVID-19 have been downloaded nearly 100,000 times, with some articles at more than 19,000 downloads (Jalongo, 2021). The success of the special issue of the journal suggested that there was a need for curated information about COVID-19 and its consequences for early childhood education and care, so we redoubled our efforts with the book project. We began with a call for abstracts posted online and shared via various listservs. Our definition of the early childhood years was that used by the National Association for the Education of Young Children: from infancy up to and including 8 years of age. The audience for this book is the same as the audience for the *Educating the Young Child Series*: professionals dedicated to the care and education of very young children.

In terms of manuscript types, we indicated that we were receptive to: (1) reviews of research that included implications for early childhood practice; (2) original research that employed quantitative, qualitative, and mixed methods; and (3) practical articles that critically analyzed policies and pedagogy. Of course, all research had to conform to ethical standards and the principles of informed consent, and faculty members were required to verify that the research had been approved by their Institutional Review Boards.

In our call for book chapters, we provided some direction about the content sought for this edited volume. The list was by no means exhaustive but was intended to serve as a starting point for formulating ideas. Included among the topics were such things as: the history of health pandemics and their consequences for young children, the wellbeing of children, families, and professionals; perspectives and practices of parents/families, caregivers, teachers, administrators, and teacher

educators; support for young children's learning—particularly those at-risk, in marginalized groups, or with delays/disorders; and college/university faculty members' efforts to maintain professional standards despite disruptions to early childhood courses and professional practicum experiences. We further indicated that we were particularly keen to receive manuscripts that reflected interagency collaborations to support children and families as well as global perspectives on the COVID-19 pandemic.

Given the diverse, international readership of Springer Nature's *Educating the Young Child Series* and the interdisciplinary implications of a global pandemic, we were particularly eager to see collaborative efforts that looked beyond the local context and involved networking with other early childhood experts, as well as professionals in related fields.

The deadline was tight yet, much to our surprise, over 100 different abstracts and articles from around the world were submitted. Considering the extraordinary personal and professional pressures that scholars were experiencing, the fact that these prospective authors had changed their research agendas and were pursuing publication was impressive. This groundswell of interest in the topic was encouraging, particularly because the submissions received represented diverse backgrounds, nationalities, and perspectives on the field, both in basic and higher education.

Unique Contributions of the Book

This edited volume, consisting of 25 chapters submitted by teachers/scholars from throughout the world has several unique characteristics.

Recency of the Phenomenon The topic of COVID-19 is exceptionally timely. Nearly everything published about the coronavirus was published within the past 2 years and much of the most recent literature is posted online in pre-publication format. The COVID-19 pandemic is both an up-to-the minute and continually evolving issue. We still cannot fathom the indelible mark this crisis will make on individuals, groups, nations, and the planet.

Focus on the Early Years Although there are many publications on the world health pandemic being published currently, most of them focus on scientific/medical evidence, public health systems and concerns, and government policies enacted to control transmission of the disease and put essential supports into place. Currently and to the best of our knowledge, this is the first book of its type.

International Perspectives Rather than present a USA perspective only, our book synthesizes theory, research, and professional practice to provide keen insights on the challenges associated with COVID-19.

Effects Across Socioeconomic Strata Although those who face the greatest challenges to survival have tended to suffer the most, it has had consequences for people at all levels of power, influence, and income. COVID-19 represents an existential crisis for all, even though some are better equipped to cope physically, socially,

financially, and emotionally. This makes it a particularly interesting educational issue because, even in wealthy countries that espouse democratic ideals, support systems faltered and failed so many people. Furthermore, individuals and groups worldwide could not, for a variety of reasons, follow even the most basic guidelines from the World Health Organization to halt the spread of the virus by doing such things as avoiding physical contact, washing hands frequently, and wearing a mask.

Profound Consequences for the Very Young Although COVID-19 is not a disease such as polio, which destroyed children's physical health, it still ravaged young children's lives as they lost their support systems, both familial and institutional. Even for children who did not suffer the loss of a caregiver, many were physically distant for more than a year. Young children had their educational experiences more disrupted than those of older students because of their need for active, play-based approaches, peer interaction, and more in-person adult guidance. For most children who relied on programs to provide health, nutrition, social services, and other forms of professional help, these interventions were disrupted or perhaps no longer accessible. If children lived in troubled, violent families where neglect or abuse occurred or parents/caregivers had substance abuse or severe mental health issues, these children became trapped indoors with these negative influences intensified, the external supervision via social services absent, and the safe havens supplied by many early childhood and care programs discontinued. The contributors to this book have the wisdom to fully appreciate that we are far from equal in our ability to summon up the human and material resources necessary to survive and thrive. Children from 0–8 years are a vulnerable group because they are reliant on others. When their basic needs are not met, families are stressed to the breaking point, opportunities to learn are restricted, and support services are denied, it does undeniable damage.

Overview of the Book

The 25 chapters comprising the volume have been clustered into five sections for ease of reference. Part I: COVID-19 and the Global Early Childhood Landscape begins with this introduction to the work (Chap. 1). Suzanne Egan's and Jennifer Pope's application of Bronfenbrenner's bioecological systems to the pandemic provides a theoretical perspective (Chap. 2). Part I also includes Ellen McKenzie's discussion of challenges to developmentally appropriate practices (Chap. 3), an analysis of government policies affecting young children in 10 countries headed by Antje Rothe (Chap. 4), Sunita Singh's analysis of the pandemic in India (Chap. 5), and Marcela Batistič Zorec and Mojca Peček's interview study with preschoolers (Chap. 6).

The wellbeing of early childhood personnel was another theme in the chapters accepted for publication, so Chaps. 7, 8, 9, and 10 constitute Part II of this edited

work. Included are Lisa Murray and her co-authors' chapter on Australian early childhood educators (Chap. 7), Nathalie Bigras and her colleagues' chapter on early childhood program managers (Chap. 8), Laura McFarland and her co-authors' study of early childhood educators (Chap. 9), and Lynne Lafave and her colleagues' insider perspective on wellbeing in early childhood personnel (Chap. 10).

Part III: Focus on Families consists of four chapters. In Chap. 11, Dorit Aram and co-authors provide a cross-cultural perspective on parenting during the pandemic. Marisa Macy explores the provision of services for young children with delays/disabilities, despite lockdowns (Chap. 12). In Chap. 13, Susan Sonnenschein and her co-authors investigate obstacles associated with online instruction of young children, while in Chap. 15, Laura Lee McIntyre and her co-authors offer practical guidance on using telehealth to support young children with special needs.

Early childhood personnel—childcare providers, teachers, program administrators, and college/university faculty members responsible for the education of preservice/in-service caregivers and teachers—are the focus of Part IV. Patty Hrusa Williams and Donna Karno examine the situation of family child care providers in a rural context (Chap. 15) while Crystasany R. Turner (Chap. 16) reports on her qualitative research with Black family child care providers who functioned as community mothers during the crisis. In Chap. 17, Kate Anderson and a large international team report on pre-primary schoolteachers' perspectives in Ethiopia, Liberia, and Pakistan. Natalie Schock and her co-authors share their qualitative research findings from Head Start teachers in the United States in Chap. 18. The fourth section concludes with Evan Throop Johnson, Lori McKee, and Anne Murray-Orr's design of a meaningful practicum for preservice teachers, even with stay-at-home orders in effect (Chap. 19).

The final section, Part V: Delivering Program and Services Despite Challenges, describes how early childhood professionals quickly adapted programs for the very young to make the best of an unprecedented situation. In Chap. 20, Evdokia Pittas, Inmaculada Fajardo Bravo, and Nadina Gómez-Merino analyze online learning practices as they affect young children. Kristy Timmons and her co-authors look at remote teaching and learning in the early primary years in Canada (Chap. 21). The youngest children—infants and toddlers—also had their education disrupted by COVID-19. This is the topic of Marjory Ebbeck and her co-authors' analysis of curriculum quality in Singapore (Chap. 22). Continuation of support services for children with disabilities is the topic of Chap. 23 by Elizabeth A Steed. Chapter 24, written by a large international team of authors led by Beatriz Ilari, studies how music programs for young children adapted to the difficult circumstances associated with COVID-19. The book concludes with a look toward our uncertain future as Megan Kunze and Laura Lee McIntyre reflect on the situation for young children at-risk, post-pandemic (Chap. 25). The authors of the assembled chapters have shared exceptionally diverse subject matter, yet they are unified by their stance of advocacy for young children, families, caregivers/teachers/administrators, and faculty working with preservice and in-service teachers. Collectively they represent well-reasoned responses to a worldwide panic and concerted efforts to mitigate the adverse influences of the COVID-19 pandemic.

Conclusion

COVID-19 and responses to it have resulted in:

The worst education crisis of the last century. The health pandemic, its subsequent massive and extended school closures, and the accompanying strain in public and family budgets (that result from one of the deepest global economic recessions in history) are unprecedented triple shocks to the human capital of a generation of children. If recovery strategies are not successfully designed and deployed, the intergenerational consequences of this pandemic will be felt for several generations to come. (Azevedo et al., 2022, p. 422)

As the contributors assembled for this volume assert, COVID-19 had—and continues to have—a major impact, and the physical and psychological toll has been particularly acute for the youngest members of the global community (OMEP Executive Committee, 2020; Pascal et al., 2020). There is little question that the current global health crisis has redefined and, in some ways, jeopardized the field of early childhood education and care as we once knew it. Much of the hard-won progress that was made throughout the world in supporting young children and families could not withstand the intense pressures exerted by the crisis.

Although it may be tempting to highlight even the smallest positive changes that were instituted while living through a pandemic thus far, the truth is that much of it consisted of muddling through somehow. We had to accept that circumstances were far from ideal, relax some rules, and modify some standards. It is premature to claim that we are “restructuring” or “reimagining” education. The road to recovery necessitates a full understanding of the pandemic’s effects on systems, educators, and students across three different time frames: (1) the immediate impact of the COVID-19 crisis, (2) the aftermath as the epidemic is wrestled under control, and (3) the medium-term aftermath that occurs when education systems, societies, and economies achieve some level of stability (Anderson, 2021). At this early juncture, perhaps the best we can aim for is “the development of strategies that will position systems and institutions to anticipate and prepare for future similar events and leverage this crisis to make fresh starts where systems, processes, and practices have clearly not worked, not supported everyone equally, and not offered individuals and communities the opportunities to which they have a legitimate claim” (Soudien et al., 2022, p. 303).

On the brighter side, the rest of the educational field finally is catching up to what early childhood has advocated for decades; namely, a focus on the whole child that takes all developmental domains into account; knowledge of child development; and effective collaboration with families, communities, and professionals in the allied fields. Shortly before COVID-19 hit, the Aspen Institute (2019) assembled a National Commission on Social, Emotional and Academic Development comprised of an impressive group of scholars, researchers, and policymakers. The six key recommendations that emerged were remarkably consistent with the early childhood philosophy that has existed for at least as long as most of us with a long history in the field can remember. They included:

1. Set a clear vision that broadens the definition of student success to prioritize the whole child
2. Transform learning settings so they are safe and supportive for all young people
3. Change instruction to teach social, emotional, and cognitive skills; embed these skills in academics and in schoolwide practices
4. Build adult expertise in child development
5. Align resources and leverage partners in the community to address the whole child
6. Forge closer connections between research and practice

Up until quite recently, many educators working with older students would have dismissed these ideas as too “soft” and raised objections such as “What about accountability, academic standards, test results, and international comparisons of student achievement?” Evidently, at least some educational leaders are now willing to respect these time-honored tenets of our field and regard them as enlightened.

It remains to be seen whether humankind has learned from COVID-19 or if they will, in the rush to return to misguided notions about normalcy, revert to practices that ignore global interdependence, protect the privileged, and preserve the status quo. Attempts to cope with the pandemic have laid bare the inequities and the failures of entire nations, including those that are well resourced. What our youngest generation needs—perhaps now more than ever before—is compassion, advocacy, wisdom, research, and effective practice from the field of early childhood education and care. All these things are amply represented in the chapters that follow, contributed by an impressive group of teachers/scholars with a shared commitment to the very young child.

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Chapter 2

A Bioecological Systems Approach to Understanding the Impact of the COVID-19 Pandemic: Implications for the Education and Care of Young Children



Suzanne M. Egan  and Jennifer Pope

The early part of 2020 saw the world face the unprecedented and wide-ranging challenge of the COVID-19 pandemic. The physical, psychological, and educational effects on children and adults globally were on a scale unlike anything in living memory. Internationally, researchers immediately began to document and attempt to understand the impact of the crisis on all aspects of humanity. A vast array of research articles across a range of disciplines have been published recently on the topic of COVID-19, with undoubtedly many more to come in future years. In order to fully grasp the potential extent of the effects of this crisis, it is essential to adopt a holistic view, considering all of the contextual factors that may affect an individual, particularly the developing child.

The global community of researchers has established multiple effects of the COVID-19 pandemic on children related to their physical health, social development and emotional well-being, as well as their education and care in settings outside the home. However, the findings from this wealth of research need to be consolidated and pulled together in order to make sense of them and take a holistic view of the effects of the pandemic on the child. As Poincare (1905) notes, ‘science is built up of facts, as a house is built of stones; but an accumulation of facts is no more a science than a heap of stones is a house’ (p. 141). A theoretical framework gives facts structure and relates them to one another, and it guides new research and further recommendations. We propose that by considering various research findings through the lens of Bronfenbrenner’s bioecological model, this allows us to do that, and to take a scientific and holistic approach to understanding this important and challenging context. In the remainder of this chapter, we describe Bronfenbrenner’s model and

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the five different ecological systems that influence development and discuss how these different systems may shape early development during the COVID-19 pandemic.

Bronfenbrenner's Bioecological Model

Bronfenbrenner's bioecological model of human development maintains that children's development is directly influenced by a series of ecological systems that interact with biological factors (Bronfenbrenner, 1979, 1994, 2005; Bronfenbrenner & Morris, 2006). The model highlights the complexity of interactions across five ecological systems, which all influence a child's development in varying ways, with the child placed centrally within the model. The system at the centre of the model is the microsystem, which comprises children's direct relationships and immediate interactions with family members or caregivers. The mesosystem considers the interactions between microsystems (such as the relationships between the home and the early childhood setting). Bronfenbrenner identified social contexts that impact on the child but do not actually include the child as the exosystem (an example could be the parental work environment). The macrosystem includes wider influencing factors such as cultural norms, societal attitudes, and government policies. The influence of time is encompassed through the chronosystem, where time is considered in terms of the individual across the lifespan or collectively, from a generational perspective or social movement. This theoretical framework recognises the uniqueness of each child's ecosystems, whereby the child is centrally placed within the complex interactions of the systems model. The layered systems, and how they interact, must be considered in terms of their influence on the child's development. Just how these systems interact and influence a child's development is complex and multifaceted, but holistic in nature.

This theory provides a useful framework in which to consider the multiple effects of the COVID-19 pandemic on the developing child, and how those effects manifest themselves in the child's world (see Fig. 2.1). This is particularly pertinent in the context of early childhood education and care (ECEC), as early life experiences leave a lasting imprint on children's learning and development (Center for the Developing Child at Harvard, 2010). This chapter therefore considers the effects of the COVID-19 pandemic from the perspective of each of the ecological systems proposed by Bronfenbrenner, beginning with the macrosystem, and discusses how this framework is useful in consolidating and making sense of the many and varied new research findings reported on COVID-19 that are emerging.

COVID-19 and the Macrosystem

Bronfenbrenner (2005) defines the macrosystem as 'a societal blueprint for a particular culture, subculture, or other broader social context' (p. 150). The World Health

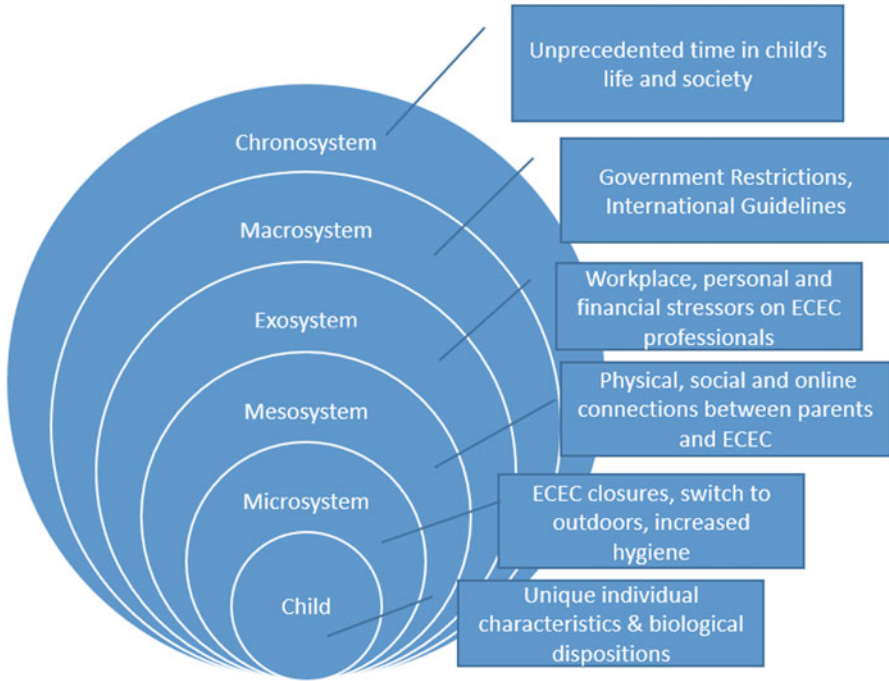


Fig. 2.1 Overview of COVID pandemic from a bioecological systems model

Organization (WHO, 2020) declared on 11 March 2020 that the coronavirus SARS-CoV-2 (COVID-19) epidemic was a global pandemic. The lives of families were severely disrupted in early 2020 when, across the globe, governments placed substantial restrictions on all citizens. New rules about social distance (also called physical distance), working from home, and the closure of schools, and early childhood settings were introduced in many countries. Different governments implemented COVID-19 restrictions in different ways and at different times, to protect citizens and limit the spread of the disease. Commonalities tended to include the encouragement of physical distance between people, a heightened focus on hygiene practices and personal protective equipment as well as working from home for everyone except essential workers.

In relation to ECEC provision, some countries, such as Ireland, ordered the closure of all provision (Egan et al., 2021), while other countries or regions, such as Quebec, Canada, permitted provision for the children of essential workers (Bigras et al., 2021). The closure or limits on provision were also implemented for different lengths of time in different countries. For example, in Ireland, ECEC services closed to all children on 13 March 2020 with a gradual reopening commenced in late June. In contrast, in Quebec, ECEC services were limited to the children of essential workers on 13 March 2020, with a gradual reopening of services from mid-May. ECEC and school provision in some countries, (e.g., Panama and other parts of Latin

America) remained closed for in-person instruction for over a year (UNICEF, 2021). These differences in provision between different countries highlight the importance of macrosystem factors in considering the impact of the pandemic on young children. The impact of the pandemic on their early care and education has differed from country to country (and at times, region to region or locality to locality, whereby restrictions may have been in place in a localised area in line with public health guidelines), as different governments reacted to national COVID-19 case numbers, hospital admissions, and deaths.

Young children's day-to-day experiences in the home and within early childhood education and care have been directly impacted by the macrosystem. At the local, national, and even international levels, the interpretation of the available epidemiological data and a developing understanding of COVID-19 and the consequent responses of governments and society, in terms of public health advice, directly affected young children. When early childhood settings did reopen in Ireland, for example, there were specific new government policy guidelines in place advocating for play pods (i.e., small defined groupings of children to limit physical interactions and the spread of the virus), greater use of the outdoor space, social distancing for adults and increased hygiene measures in keeping with public health guidelines (DCYA, 2020a, b, c). Variations in the implementations of restrictions from country to country should be considered by researchers when interpreting the impact of the pandemic on young children around the world.

Initially, based on previous knowledge of the spread of respiratory infections, children were identified as significant vectors for the disease, and it was thought that they could pose a significant risk to older adults, yet this was not supported by the evidence (Lee & Raszka, 2020). In many jurisdictions, the public health advice for older adults was to isolate and this meant that many young children did not meet their grandparents or extended family for some time. As mentioned earlier, the systems interact and influence each other and here is an example that demonstrates the impact that the macrosystem can have on the microsystem in a variety of ways. These wider restrictions imposed at a macrosystem level had a direct impact on the nature of interactions and experiences that children had been used to. Different countries and cultures interpreted the scientific advice in different ways (and depending on the political ideologies in power) reacted in varying degrees in terms of wider welfare policy measures. In Ireland, for example, payments were made for those made unemployed or furloughed due to the pandemic (PUP, Pandemic Unemployment Payment) and supports such as food packages for children and families living in poverty. These policies were also available for ECEC professionals when necessary, such as payments for staff that were furloughed and tax rebates for using domestic resources (e.g., electricity, Wi-Fi) when working from home.

Despite similar restrictions implemented for all citizens, the lives of families and young children were affected disproportionately, again demonstrating just how the macrosystem interacts with other systems such as the microsystem. Within an Irish context (Ombudsman for Children, 2021), and internationally (OECD, 2020a, b), reports of increases in domestic violence and abuse as well as increased rates of child poverty and violations of children's rights have been documented. International

research stressed how poverty put children at the highest risk of suffering from the COVID-19 crisis (OECD, 2020a, b). In a review of the literature, Jalongo (2021) notes that ‘the suspension of childcare services due to isolation measures exacted the highest toll on families who were already struggling, and these families are most likely to experience severe, long-term deleterious effects’ (p. 766). As a result, in January 2021, during a widespread lockdown in Ireland, early childhood provision for vulnerable young children and families at greatest risk remained open, despite school closures – an example of how the macrosystem can be influenced by the microsystem also.

COVID-19 and the Microsystem

These changes in the macrosystem environment due to the pandemic resulted in changes in every other ecological system in which the child develops. Bronfenbrenner (2005) defined the microsystem as ‘a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical and material features and containing other persons with distinctive characteristics of temperament, personality and systems of belief’ (p. 148). Many young children faced a substantial change in their microsystem as they were placed on a stay-at-home order, and were no longer permitted to see their friends, extended family members, teachers, or caregivers outside the family. This had negative effects on many children and their families with parents having fears over their children’s physical and mental health (Fong & Iarocci, 2020). For example, Egan et al. (2021) report that some parents described their young children as ‘more subdued’, ‘very spaced out’, and with ‘behavioural issues magnified’. Most parents indicated that their young child was missing their friends and playing with other children, as well as missing school or childcare.

Within the microsystem, every family was affected in some capacity and the sense of security, stability, and routine was altered for many. However, despite being in this same ‘storm’, not every child or family ‘was on the same boat’ (Albuquerque & Santos, 2021) so to speak, with children being more vulnerable to the wider impacts of the pandemic, such as grief and loss of loved ones. Hillis et al. (2021) estimated that over a million children globally were orphaned due to the pandemic between 1 March 2020 and 30 April 2021. Some children may also have been more vulnerable than others as their microsystems were influenced in different ways or to a greater extent by the other systems. The mental health impacts of COVID-19 are greater for parents in high-risk, marginalised communities, which also has an impact for young children (Alzono et al., 2021). The restrictions and closure of early childhood services posed significant challenges for young children with additional learning needs and disabilities, children experiencing homelessness, and living in emergency accommodation and/or adverse home circumstances (Ombudsman for Children, 2021).

However, it was not the case that every child experienced negative effects of the restrictions and lockdown, as some positive effects were also reported by families (Evans et al., 2020). For example, Egan et al. (2021) found that some parents indicated benefits for their child's play and for family relationships. Spending more time with siblings was noted as a positive effect, with parents describing the increased closeness between their children due to the lockdown, referring to the 'incredibly close bond' or 'a stronger bond with siblings' and that 'now they are best of friends'. Evans and others (2020) also noted parents' views that 'spending more time together has strengthened bonds'. In relation to their child's play, parents also noted positives such as 'much better at self-directed free play', 'play has become more sophisticated' and 'spending lots of time outside' (Egan et al., 2021). The different examples of family experiences, with some children suffering from low mood and anxiety while others thrive, highlight the importance of considering the individual experiences of each child in their microsystem, in how they were affected by the pandemic.

Regardless of the positive or negative impact of the restrictions on children in the early months of lockdown, it seems all children were affected in some way, highlighting the need for a well-educated, highly skilled, responsive, and adaptable workforce in ECEC as they welcomed the children back to their setting. Children also faced changes on their return to their ECEC setting, adjusting to new routines in line with public health advice. Cognisant of children's socio-emotional development and the importance of relationships and play in early childhood practice, many countries developed policy guidelines advocating for a developmentally appropriate approach to social distancing measures within the early childhood settings in the form of play pods' (Department of Children and Youth Affairs, DCYA, 2020a, b, c). Play pods (also referred to as 'cohorting') imply smaller, confined groups of children working with specific adults in designated spaces (Center for Disease Control and Prevention (CDC), 2021). In order to minimise risk of spread of infection, the key person approach was recommended to support meaningful relationships, facilitating closer interaction during this challenging time, while also minimising social contacts and potentially facilitating contact tracing if necessary. From the perspective of a young child, the ECEC microsystem environment changed for them, limiting both the children and adults they could interact with, as well as the toys they could play with and the spaces they could play in.

One substantial change to the ECEC environment that many children were faced with, particularly in Ireland, was a switch to being primarily outdoors rather than indoors. Based on epidemiological evidence on the transmission of COVID-19, the outdoors were identified as a safer place to play. Many early childhood settings across the world, most notably in Scandinavian countries, have traditionally maximised on the outdoor learning environment long before this pandemic. However, in response to public health recommendations, many countries began to place more emphasis on utilising outdoor spaces when they reopened. In a time of restrictions and wider threat to health and well-being, the outdoors also affords children freedom and opportunity to promote well-being – physically and socio-emotionally (Davis et al., 2021). Under initial lockdown measures, in some

jurisdictions, playgrounds had also been closed and some children were deprived of any opportunities to play outdoors (Darmody et al., 2020).

There was also a renewed focus on the importance of hygiene measures and infection control policies (although it should be noted that early childhood settings in Ireland are already highly regulated and inspected from this perspective). However, physical distancing measures and wearing personal protective equipment, such as masks, amongst adults, and children were a new expectation in many parts of the world. Young children were also asked to engage in regular hand sanitising and hand washing. Through responsive relationships and nurturing environments within the microsystem of the early childhood setting, educators were able to support children with these changes in the microsystem environment. Early childhood educators also play an important role in supporting coping mechanisms, addressing grief and loss, and promoting the resilience and well-being of young children (OECD, 2021).

COVID-19 and the Mesosystem

Bronfenbrenner (2005) stated that the mesosystem ‘comprises the linkages and processes taking place between two or more settings containing the developing person (e.g., the relations between home and school, school and workplace)’ (p. 148). The linkages between microsystems changed dramatically during the pandemic. The connections between the young child’s home and the ECEC setting or school had to adapt rapidly to the “new normal.” In the early weeks of lockdowns, many schools switched to online provision of education through Zoom and various other educational online apps (Egan & Beatty, 2021). Online provision is more difficult with younger children, but some early years professionals did engage in online provision also (Bigras et al., 2021). For example, some providers facilitated arts and crafts activities, with the parent supporting the child, or engaged in online story reading via YouTube or Skype. These online connections were essential in maintaining the mesosystem links between the home and the early years setting or school. Most early childhood educators indicated that these activities, such as virtual interactions with children and phone calls with parents, made them feel useful while working remotely (Bigras et al., 2021).

However, not all families experienced strong ongoing links with their ECEC or school setting during lockdown for a variety of reasons. For some, the home or the ECEC setting did not have the necessary internet or technology resources to support this link (Atiles et al., 2021). Such communication also requires a certain level of proficiency in digital literacy skills, and, for some families, this may also have been a barrier. For others, it may be that as parents were required to care for their own children at home, while also working full time from home, that the time was not available to support the online connection to the early childhood setting due to work demands, and this sometimes added to stress and anxiety for parents (Timmons et al., 2021). From an inclusion perspective, some young children with additional learning needs and their families found this virtual world of remote learning to be particularly

challenging (Jalongo, 2021). It was difficult to differentiate in terms of learning for individual children and provide a play-based or inquiry-based learning environment (Timmons et al., 2021). From a children's rights perspective, it was evident that there were significant inequalities in terms of access to and participation in early childhood education within this virtual space. Some parents, however, may not have sought the connection to the ECEC setting or school if they felt that their child benefitted from the free time with the lack of structure and routine and increased time for free play. Some parents viewed the lockdown as '*a break from the daily grind*', with 'no stress and rushing anymore' (Egan et al., 2021).

Even after in-person care and education of young children resumed, disruptions to the connections between ECEC practitioners and parents and between the physical environments of the home and the early years setting persisted (Bigras et al., 2021). In relation to the social and physical connections between the ECEC professional and the parent, this was limited and had to be altered to accommodate physical distance and minimise the spread of the virus. For example, in many countries, parents were no longer permitted into ECEC buildings or schools to drop off or collect their child. In many instances, these transitions took place outdoors. From children's perspective, this could represent a considerable change from how things were before the restrictions if the children were accustomed to having their family member help them to settle in when they arrived at school or childcare. In an attempt to support children with this change, some early childhood settings adopted creative approaches and provided sheltered outdoor spaces for drop-offs or child-sized doors or pathways (designed for dramatic effect, such as castle doors).

Conversations between parents and ECEC professionals were also limited by the presence of facial masks and physical distance between them. In one study, 16.8% of ECEC professionals indicated that their interactions with parents were difficult or very difficult to conduct, and these interactions were hindered by a number of factors such as parents not being allowed to enter the early years setting (Bigras et al., 2021). The lack of interactions with parents could also lead to increased anxiety and stress for parents, with some parents noting their worry about their child returning to school or their ECEC setting in advance of its reopening (Egan et al., 2021). In addition to the weakening of social links between the microsystems, there was also a weakening of physical links for children. For example, many ECEC settings no longer permitted children to bring a favourite toy or comfort blanket from home for hygiene reasons. Some settings also required that the child had separate outdoor wear for during the ECEC session that would remain in the setting, and not be brought home. Some settings also requested that school bags (backpacks) not be brought in and that the child might carry their lunch only, so that no additional physical objects were brought from the home setting to the ECEC or school setting.

Kim and others (2021) highlighted the need to focus on strategies that promote parental involvement, particularly for more vulnerable families, and to strengthen community supports in order to reduce the gap in inequality of experience during the pandemic. In an example of the macrosystem affecting the mesosystem, the Irish Government issued guidelines on maintaining relationships in keeping with recommended social distancing guidelines. Strong mesosystem links, in this case

between the home and ECEC, are important in supporting children in challenging circumstances such as the COVID-19 pandemic.

COVID-19 and the Chronosystem

The chronosystem considers the impact of historical and sociocultural factors on child development, as well as current thinking towards children and societal attitudes to childhood. Bronfenbrenner (2005) suggests that the chronosystem also relates to time both in the short term, in considering life experiences, and in the longer term, in considering the life course of the individual. From a sociohistorical perspective, consideration of the chronosystem highlights how advances in technology have facilitated the ongoing mesosystem connections between ECEC, school, and home settings. At no other point in history has it been as easy to communicate remotely with other people. The internet also facilitated ease of access to educational resources and professionals in a way that would not have been possible for most families even 20 years ago.

Considering the chronosystem from the perspective of the lifespan of the child, the timing of the pandemic and resulting restrictions may have quite individual effects on different children depending on their age and their needs when the crisis started. The effects on the child may also be short term or long term (Jalongo, 2021). For example, many infants born during early 2020 will have quite a different first year of life socially, compared to other infants with a lot less exposure to other people, including extended family members. These social differences include a change in both the quantity and quality of social interactions with individuals outside their immediate family (e.g., Vazquez-Vazquez et al., 2021). Due to the limits placed on contact with other people, these infants would have been exposed to fewer people, and those they did meet were likely wearing a face mask. Additionally, the typical close physical interactions with a new infant that would typically occur in extended family gatherings and social networks, of the baby potentially being held and cuddled by people other than their parents, may not have happened. Furthermore, parent and baby groups were cancelled so that infants and toddlers had fewer opportunities to physically interact with children other than their siblings. For example, Vazquez-Vazquez et al. (2021) reported an impact on infant feeding practices due to a lack of “face-to-face” support for new mothers during the lockdown. The reduced physical and social connections may have affected the transition to the early years setting for the infant when their parents returned to work after maternity or paternity leave.

Children with additional needs also face particular challenges, with many families severely negatively impacted by the withdrawal or limiting of early intervention such as physical education and care supports provided by special schools or other health and social care professionals (e.g., speech and language therapists, occupational therapists, and physiotherapists) (Bannink Mbazzi et al., 2021; Couper-Kenney & Riddall, 2021). There is a limited window of opportunity during which early intervention can be most effective in a child’s life and the span of the pandemic

and restrictions to date (approximately 18 months) represents a significant proportion of the life of any young child. The early years are a special period during the lifespan of a person of rapid physical, cognitive, and socio-emotional changes (Center on the Developing Child at Harvard, 2010), and it is time that cannot be reclaimed. Suitable interventions that may be very effective at age 3, for example, may be much more difficult at age 6, particularly where advances made by the child have been lost. For example, Egan et al. (2021) noted the case of a parent who identified the regression of their 6-year-old son's behaviour and language abilities stating he was 'emotionally a lot more demanding and behaviours have reverted to that of a younger child. Also, he had speech issues which had much improved after speech therapy, but this has also regressed' (p. 929).

The effects of the restrictions on any individual child will have very much differed depending on the individual child, and also the length of the service withdrawal or limitation that they face which were typically determined by macrosystem factors. Greater limitations of services, and at key points in a child's life, may result in more severe behaviour and language regressions. This then potentially also has implications for the child and the teacher when the child commences ECEC or school again. For many teachers, the child with additional needs returning to their classroom, who may have made substantial gains before the lockdowns occurred, may not be still capable of the same behaviours and the transition may be very challenging for the child. The expectations of the teacher may need to be adjusted and additional supports be made available to the child, family, and the early childhood educators. This highlights the potential interactions between the chronosystem and the microsystem environments in supporting the developing child.

Another example of the importance of the timing of the pandemic in a child's life relates to those transitioning from an early childhood setting to a school setting. This transition represents a large change in the life of a child, and of their family (Quenzer-Alfred et al., 2021). Relationships with peers, friends, teachers, and carers are typically marked and celebrated at the end of the academic year, as the ECEC professional supports the child in moving on from the setting. However, due to the COVID-19 restrictions, it was not possible for these physical 'goodbyes' to take place. Additionally, the transition to the school classroom at the start of a new academic year, typically containing more children and more rules and a new teacher, may have been made more difficult by the restrictions in place. For example, the children may have had to wear masks or enter the building without their parents accompanying them. These factors may have presented additional challenges for the teacher in settling in the children to their new school.

COVID-19 and the Exosystem

Bronfenbrenner (2005) describes the exosystem as 'the linkage and processes taking place between two or more settings, at least one of which does not ordinarily contain the developing person, but in which events occur that influence processes within the

immediate setting that does contain that person (e.g., for a child, the relationship between the home and the parent's workplace' (p. 148). The ECEC setting and management are influenced by wider factors, often beyond the control of children and families, such as the availability of government grants to adapt settings for increased hygiene practices, outdoor spaces, and support periods of unemployment for educators.

In advance of reopening, ECEC professionals were cognisant of the challenges they would face during the opening of services and the changes that would need to be implemented in the setting, such as maintaining physical distances, wearing a mask or visor and maintaining all health measures with a full group of children (Bigras et al., 2021). As mentioned previously, the Irish government for example had guidelines for reopening of early childhood settings which strongly advocated for the increased utilisation of the outdoor space as a safer alternative to prolonged contact indoors. To support these guidelines, they also provided a small grant funding to help to resource and develop the outdoor environment and to facilitate play pods. These guidelines and supports had to be implemented by the ECEC managers and professionals in order to adapt the physical environment of the ECEC setting. This can be seen as an example of how the exosystem interacts with the macrosystem to have a direct influence on the microsystem in how children interact with each other and their caregivers on the ground.

International research shows that the mental health and well-being of many adults have been affected by the pandemic and resulting restrictions. A number of studies have indicated that many people have experienced increased symptoms of psychological distress, anxiety, depression, and stress (e.g., Jiang et al., 2020; Salari et al., 2020; Xiong et al., 2020), and it seems that early childhood professionals are no exception. Bigras et al. (2021) explored the impact of the crisis on the emotional state of early childhood educators in Quebec during the early stages of the pandemic in May 2020. They found that 14.7% of professionals reported low levels of well-being in the ECEC work environment (approximately 1 in 7), while 44.2% report high or very high levels of stress (approximately 1 in 2). These levels were consistent with levels of worry and anxiety in the general population at the time also. Bigras et al. (2021) suggested that compared to before the pandemic, the ECEC workforce also had greater physical and psychological demands placed on them, as they attempted to work in challenging circumstances.

Atiles et al. (2021) also highlighted the many challenges faced by early childhood educators such as a lack of preparedness for online distance teaching and learning and the uncertainty of returning to face-to-face teaching during the pandemic. Significantly, however, their research identified teacher dedication as the most common theme emerging from their interview data and despite the anxieties of early childhood educators, their commitment to the children and families in their institutions took precedence. However, it is difficult to work under conditions of stress and uncertainty, such as potential regular absences of children and colleagues due to COVID testing, being a 'close contact' or contracting the disease. These are far from ideal circumstances in which to be providing the usual high standard quality education and care to young children. However, in their research on early childhood

educator's self-reported well-being during the pandemic, Eadie et al. (2021) observed that despite negative reports of the impact of COVID-19, the well-being of the participants was relatively high and associated with staff retention. Significantly, stronger well-being was associated with better relationships, high-quality interactions, and less conflict. Eadie et al. stress the importance of organisational structure to support staff well-being for staff retention but also for nurturing environments that promote stable and responsive relationships for staff and children.

Stable, responsive relationships are also important in the home environment, and this too was affected by exosystem factors. For example, in the initial lockdown, some support agencies for families also may have had limited capacity to work together such as social services and police, in terms of home-visits, developmental check-ups for babies and young children in local health centres, and even in some jurisdictions, a decreased capacity to respond to domestic violence emergency calls, for example. Many parents were also working from home, while supporting home-schooling and domestic duties and the burden of responsibilities reportedly fell to mothers more than fathers (OECD, 2020b) This was identified as a significant source of stress and anxiety for mothers (Del Boca et al., 2020). The majority of early childhood educators are also women, and many are mothers that during lockdown measures had to juggle work, childcare responsibilities for their own children, as well as the loss of other support services. Some staff may also have faced challenges related to their personal family and financial circumstances.

Juggling work and home commitments was identified as a significant source of stress and anxiety for many parents. In their Ugandan study, Bannink Mbazzi et al. (2021) reported loss of work was also a significant source of stress and anxiety due to significant financial burdens. Fong and Iarocci (2020) in their systematic review reported that concern for the well-being of their children, compounded by childcare issues and worries about their own job security during the pandemic, contribute to increased stress levels and poorer well-being. They recommend 'family-friendly' policies that are inclusive and flexible to meet the needs of families at different times and in different ways, particularly for families who had previously been identified as at risk. Policies such as these in the workplace, and also those supporting ECEC professional's well-being, highlight how factors in the exosystem can have direct impact on the microsystems of the child. Increased stress coming from workplace demands placed on parents and ECEC professionals during the pandemic may negatively affect interactions between the adult and young child. This is particularly important to consider where a microsystem is already a highly stressed or adverse, toxic environment for a young child, with it being potentially further compounded during the pandemic.

Implications for the Future

It is clear that children's mental health, well-being, and education have been affected by the COVID-19 crisis in ways that span Bronfenbrenner's ecological systems model. These systems have interacted at different times and in different ways to

impact young children. However, more research relating to the psychological and educational effects, both positive and negative, of the crisis on young children is badly needed as policymakers and public health officials globally decide on how and when to enforce or ease restrictions. It is important that these decisions, and decisions about what supports to put in place for children and those who care for and educate them, are informed by empirical evidence and strong theoretical frameworks.

The importance of having a good theory to support and frame research in an applied field has been noted by many scholars. For example, social psychologist Kurt Lewin (1951) stated that:

Many psychologists working in an applied field are keenly aware of the need for close cooperation between theoretical and applied psychology. This can be accomplished . . . if the theorist does not look towards applied problems with high-brow aversion or with fear of social problems, and if the applied psychologist realizes that there is nothing so practical as a good theory. (p. 169)

Lewin's advocacy for the importance of theoretical and applied psychologists working together on applied problems may also be usefully considered in the field of early childhood education and care. Other researchers in the field of ECEC have also advocated for the usefulness of a strong theoretical framework in supporting children and families. For example, Swick and Williams (2006) examined the implications for early childhood educators in adopting a bioecological perspective when working with families experiencing stress.

More research evidence is required to determine the full- and longer-term extent of the psychological and educational effects of the pandemic on children. In looking to the future, Shonkoff (2021, unpagged) talks about revisioning rather than just rebuilding a post-COVID world as 'the devastating toll of the pandemic has underscored the critical importance of connecting what science is telling us to the lived experiences of people and communities'. In this revisioning process, it is essential that all systems within the bioecological framework are addressed in a comprehensive manner, rather than focusing on one aspect at one time. All of these systems interact, so a multifaceted strategy is required, supported with significant funding and suitable resources. Investing in macrosystem policies that directly impact families and local communities in positive ways need to be prioritised. There also needs to be a recognition of the vital role of early childhood educators in promoting children's well-being and an acknowledgement that their own well-being is central to providing a nurturing environment for young children to thrive in.

One situation that required people to recognise the importance of interactions amongst multiple systems were the efforts to provide meals to children who qualified for this form of support when they attended school. The OECD (2020a, b) stress the potential for serious ramifications in the short and long term from the withdrawal of this service, particularly for those also suffering from poor nutrition, or prolonged food insecurity. This, compounded with a potential lack of physical activity, could also lead to an increase in childhood obesity (Rundle et al., 2020). To address this important issue at a local level, in line with physical distancing and restrictions, some

early childhood settings and community centres provided food packages for families that were picked up or delivered. In the UK, the Manchester United footballer Marcus Rashford successfully lobbied for free school meals for children in low-income families in his campaign to address child poverty during the pandemic. Concerns about food insecurity for families were also identified by early childhood educators in Latin America and the United States and food distribution became part of their service (Atiles et al., 2021).

Another area that will require intervention and the interaction of multiple ecological systems relates to young children and families who have suffered bereavements due to COVID-19 (Albuquerque & Santos, 2021) and/or the persistent effects of family members suffering from long-COVID. The well-being of children is strongly influenced by the well-being of those around them (Blair et al., 2010), and the relationships and interactions of young children may have long-lasting impacts throughout the life-course in terms of health and well-being (Center on the Developing Child at Harvard, 2010). It is therefore important that policies are put in place to strengthen families and marginalised communities by resourcing community-based networks (Alzono et al., 2021). Strong, child-centred macrosystem policy initiatives are necessary to mitigate against the negative impacts of the pandemic into the future.

In addition to initiatives to support child development working across the ecological systems, it is essential that children's views are considered also, as the world struggles to move forward from the COVID-19 crisis. Article 12.1 of the United Nations Convention on the Rights of the Child (UNCRC, 2013) establishes the child's right to: 'express views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child' (p. 15). The child is centrally placed with Bronfenbrenner's bioecological model, so it is important that children's views be sought in relation to all ecological systems. In the UK, there is a call on the government from over 100 children's sector organisations to place children at the heart of the recovery of the impact of COVID-19 and to produce a vision of childhood, wherein children's 'voices must be at the heart of plans to rebuild, backed by renewed investment in the services and workforce that they rely on' (National Children's Bureau, 2021, p. 1).

Studies are beginning to emerge that have sought children's views directly on the effect of the pandemic on them (Lundy et al., 2021). Using a variety of methodologies such as surveys, interviews, storytelling, and play narratives (e.g., Lundy et al., 2021; Pascal & Bertram, 2021), the findings from these studies are consistent with research involving adults and parents and highlight the variety of experiences children had during the lockdown, with many feeling the negative effects. For example, Pascal and Bertram (2021) found that young children expressed a desire to see their friends, spend time outdoors, and have more time to play. Other research highlights children's fear of the virus, not only in terms of catching it themselves but also in terms of possibly infecting family members (Idoiga et al., 2020).

Investing in young children's health, well-being and early education are key to mitigate against the long-term impacts of the COVID-19 pandemic, particularly for more vulnerable children and their families. This investment is also essential from a

children's rights perspective to ensure that children's needs are met and that they have the best start in life. Adopting a bioecological framework in consolidating and interpreting empirical evidence enables a rich understanding of the implications of research findings across all levels of the environments that shape development in early childhood.

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Chapter 3

Heroes, Victims, Sacrifices, and Survivors: A Qualitative Analysis of Early Childhood Teachers' Social Media Posts During COVID-19



Ellen McKenzie

Introduction

The COVID-19 pandemic threatens children and early childhood programs worldwide (CDC, 2021; McKenzie, 2021; Timmons et al., 2021). The unprecedented closure of schools has disrupted students' and families' lives, and reopening plans underway in many countries raise concerns ranging from public health and safety to appropriate teaching practices (APA, 2020; Timmons et al., 2021). National and international agencies have provided safe reopening guidelines for implementation in schools and in various early childhood care and education contexts in numerous countries (AAP, 2021; CDC, 2021; WHO, 2021). These plans include health and safety manuals, which detail requirements for resuming in-person education, including adjustments to procedures in classrooms, playgrounds, and shared spaces (AAP; CDC; Crawford et al., 2021; WHO, 2021). In response, schools have changed dramatically (Crawford et al., 2021). As schools re-open, early childhood teachers must restructure classrooms to provide for the safety of students, thus decades of developmentally appropriate practice hang in the balance due to new COVID-19 protocols (Timmons et al., 2021). These requirements will dictate necessary changes in groupings, teaching methods, interactions, classroom design, and use of materials for early childhood teachers (AAP, 2021; CDC, 2021; Crawford et al., 2021; Timmons et al., 2021).

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Research Questions

To shed light on the threats posed to developmentally appropriate teaching methods while schools and childcare centers re-open, this chapter analyzes photographic and textual data from social media websites from early childhood classrooms around the world. The research questions which this chapter addresses are:

1. What are the challenges surrounding school re-openings in the COVID era?
2. How do these challenges threaten developmentally appropriate practices?
3. What supports do early childhood teachers need to navigate the turbulent waters ahead due to the pandemic?

Background

Due to mandated COVID-19 protocols, early childhood educators worldwide are adapting teaching methods and learning environments to ensure students' and teachers' safety (Crawford et al., 2021). Re-opening guidelines from major health organizations inform school and child-care reopening plans and classroom-level modifications for early childhood classrooms. These protocols impact developmentally appropriate practice (DAP), classroom design, and standards for student, teacher, and parent interactions (Crawford et al.; Timmons et al., 2021).

Developmentally Appropriate Practices

Children's safety, welfare, and education are detailed in the National Association for the Education of Young Children's (NAEYC) position statement – Developmentally Appropriate Practice in Early Childhood Programs, which offers guidelines for the education, care, and environments of young children (NAEYC, 2020). The US-based National Association for the Education of Young Children issued the original position statement on DAP in 1987 (Bredekamp, 1987). Developmentally appropriate practice (DAP) is based on the theories of Bronfenbrenner, Vygotsky, Dewey, Piaget, Bruner, Katz, Erikson, and Gardner (Bredekamp, 1987; Goldstein, 2008). DAP reflects a strengths-based, play-based, child-centered, engaged view of joyful learning, and suggests that teaching practices are linguistically, culturally, and ability appropriate (NAEYC, 2020). Grounded in theory, philosophy, and research, DAP environments offer a wide range of learning experiences for the young child (Elkind, 2015).

DAP Position Statements

Revised periodically as new research surfaces, the DAP position statement has undergone four iterations (Bredekamp, 1987; Bredekamp & Copple 1997; Copple & Bredekamp, 2009; NAEYC, 2020). Each bridges knowledge of child development with teaching practices and bolsters public perception and understanding of early childhood education (NAEYC, 2020). The most recent DAP position statement focuses on the social, cultural, and historical contexts of learning and development, stressing the importance of teaching the whole child using practices that include inquiry, play, and exploration (NAEYC, 2020). Table 3.1 outlines six guiding principles which shape interrelated areas of practice, explains the position statements, and forms the basis for Professional Standards and Competencies for Early Childhood Educators (NAEYC, 2019).

These six areas interact, overlap, and connect by supporting, extending, and informing one another. Based on knowledge of child development and the child's cultural context, they work together to form a nexus where developmentally appropriate practices occur, as shown in Fig. 3.1.

Benefits of DAP

The framework for DAP is grounded in decades of research on child development and based on current knowledge of how young children learn (Copple & Bredekamp, 2009). DAP promotes the young child's optimal development and benefits the learner socially, emotionally, and academically (NAEYC, 2020).

Table 3.1 DAP Position statement areas of practice and descriptors

Area of practice	Description (NAEYC, 2020)
Creating a caring, equitable community of learners	Utilizing knowledge of child development and learning in context to create a caring community of learners
Family–teacher partnerships and community connections	Forming shared, two-way partnerships with families and encouraging connections within the community
Child observation, documentation, and assessment	Gathering information about a child's learning and development through observation, documentation, and assessment
Teaching to enhance each child's development and learning	Teaching in order to bolster each child's development and learning
Planning and implementing an engaging curriculum to achieve meaningful goals	Creating engaging lessons and implementing curriculum based on goals that are important and meaningful to children, their families, and their community
Demonstrating professionalism as an early childhood educator	Making decisions that are ethical, intentional, and reflective

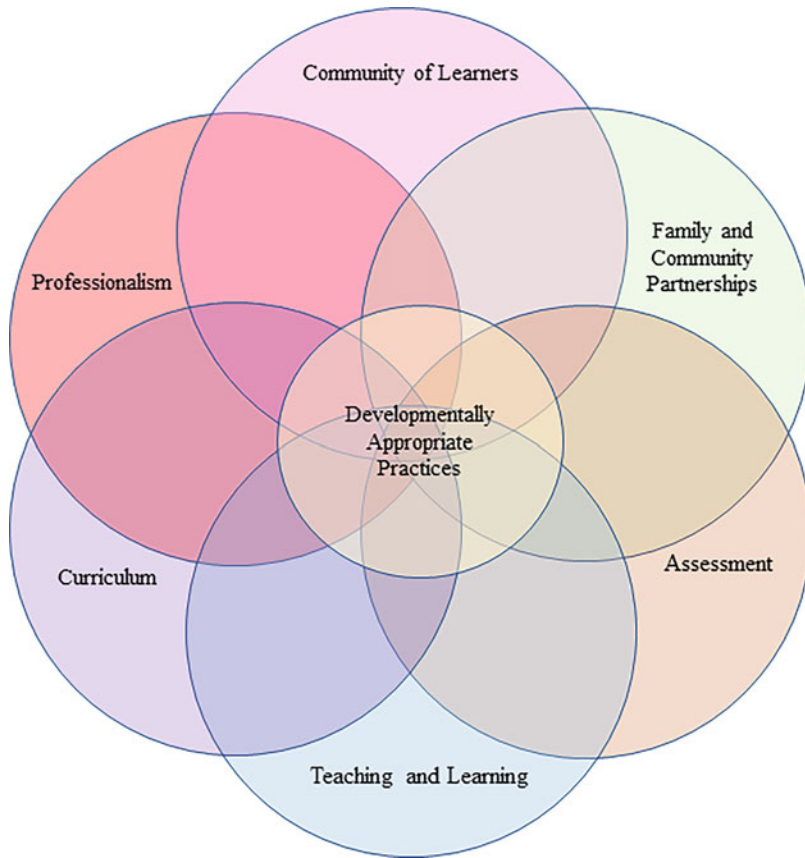


Fig. 3.1 DAP overlapping components

Academic Benefits of DAP

Research supports the positive effects of DAP, including the potential to reduce learning gaps and increase achievement (Copple & Bredekamp, 2009). There is a positive correlation between high-quality early childhood classrooms where DAP is embraced and later school success (Birdwell, 2009). In child-centered classrooms, children demonstrate greater mastery of basic skills, including receptive, expressive, written communication, daily living skills, interpersonal relationships and social skills, and gross and fine motor skills (Marcon, 1999). Play-based learning provides avenues for students to converse, pretend, and explore their physical environment, bolstering literacy, language, and math learning (Beaty, 2009; NAEYC, 2020; Yogman et al., 2018). Appropriate physical activity and play significantly affect children's health, wellness, and academic learning (Brown et al., 2020; Motta et al., 2012).

The principles of DAP influence preschool practices and curricula worldwide (Alghamdi & Ernest, 2019; Hegde & Cassidy, 2009) with international dialogues encouraging developmentally appropriate, child-centered, play-based curriculum and teaching practices (Tan, 2017). Play is culturally specific, universal, and creates an open platform for children to learn and practice speaking, listening, writing, behaviors, and cultural values in the child's social context (Holmes, 2013). Play-based, child-centered, developmentally appropriate practices have gained favor globally as early childhood educators embrace the value of DAP (Tan, 2017).

DAP Builds Agency and Resilience

DAP classrooms afford children choice and voice in their learning (Adair, 2014), through a hands-on, integrated curriculum in a classroom stocked with materials, activities, and interactions, leading to a vast array of knowledge and skills (Beaty, 2009; Parker & Thomsen, 2019). In DAP classrooms, students share and engage in the learning process, solve problems as they learn new information (Adair, 2014; Copple & Bredekamp, 2009), are more creative, and use divergent thinking skills (Hyson et al., 1990).

Further, DAP helps build a child's resilience (McKenzie, 2021; NAEYC, 2020). Teachers who embrace DAP teach the whole child and are sensitive to children's individual needs. Strong, positive relationships with teachers in a safe, stimulating, emotionally proactive environment help children build protective skills such as self-regulation, self-expression, and self-assertion (McKenzie, 2021; Mortensen & Barnett, 2016). In the face of large-scale traumatic events, such as war, famine, poverty, terrorism, political violence, displacement, and pandemics, DAP helps the young child develop a protective barrier and bolsters the young child's resilience (Masten, 2013; NAEYC, 2020; Sciaraffa et al., 2018).

The Novel Coronavirus

The COVID-19 pandemic represents an unprecedented threat to child safety and resilience. Severe acute respiratory syndrome coronavirus 2 was identified by researchers in China as a new strain of infectious disease in January of 2020 (Di Nardo et al., 2020). The World Health Organization (2021) declared COVID-19 a Public Emergency of International Concern later that month and declared a worldwide pandemic on March 11, 2020. COVID-19 has infected millions of people worldwide, causing hundreds of thousands of deaths (Di Nardo et al., 2020).

Catastrophic events like the COVID-19 pandemic risk children's overall wellbeing, including physical health, safety, cognitive growth, social development, and mental health (Egan et al., 2021; Golberstein et al., 2020; Masten, 2013; McKenzie, 2021; Sciaraffa et al., 2018). The American Psychological Association (APA, 2020) stressed the potential adverse side effects of social isolation during the

pandemic, such as loneliness, anxiety, depression, and post-traumatic stress disorder. Similarly, the WHO (2021) detailed concerns over the pandemic's mental health and psychosocial impacts – self-isolation and quarantine orders disrupting families' everyday activities, incomes, and daily routines, detailing the increased risk of depression, alcohol abuse, drug use, self-harm, and potential suicide during catastrophic events such as COVID-19. These risks could severely impact the young child's developing brain and threaten long-term learning, behavior, and mental and physical health (APA, 2020; Egan et al., 2021; Sciaraffa et al., 2018). Further possible outcomes include lack of self-regulation and impulse control, defiant behaviors, aggression, defensiveness, attention deficits, language and executive functioning delays, and learning problems (APA, 2020; Sciaraffa et al., 2018).

By fall 2020, growing concerns about children's wellbeing prompted many countries to consider how to go about reopening schools (Crawford et al., 2021; Egan et al., 2021; Timmons et al., 2021). Also, the emerging research that suggested children were not at high risk contributed to these decisions to reopen schools. Fears for marginalized children grew worldwide – children who often have no computer or internet access, have no food at home and rely on school-provided meals for basic nutrition, have no health insurance and depend on school nurses for medical services and immunizations, and take refuge in the safety of the school building (Timmons et al., 2021). Children of all socio-economic backgrounds need caring adults around them and the plethora of services provided by schools that are missing during home learning and quarantine (UNICEF, 2020).

Protocols and Guidelines

To guide the safe reopening of schools, health and child welfare organizations including the Centers for Disease Control (CDC), WHO, UNICEF, American Academy of Pediatrics (AAP), and Healthy Children (HCO) have compiled protocols for school reopening. As shown in Table 3.2, these protocols offer guidelines for distance, in-person, and hybrid schooling. Schools move fluidly between these models based on infection risk.

A Checklist for Re-opening

At the time of this writing, many early education and care programs throughout the world have or are re-opening for in-person classes due to numerous waves and new variants of the virus. Yet, there are many developing countries that are going through surges now and will not be able to open their schools for some time. As learning facilities reopen around the world, each school, daycare center, and school board must develop site-level re-opening plans. Administrators must determine the most appropriate protocols that are consistent with relevant guidelines in their jurisdiction. To help inform these efforts, I developed a checklist for schools to use when

Table 3.2 COVID-19 protocols developed by organizations

Organization	Illness	Distancing	Masks	Hand washing	Cleaning and disinfecting	Testing and screening	Signs	Barriers	Ventilation	Shared objects	Organized activities	Emotional support
World Health Organization (WHO)	Stay home if unwell	Younger children may find it difficult; at least 1 meter between individuals including spacing of desks	Younger children may find it difficult; age-appropriate mask use	Frequent hand and respiratory hygiene; ensure availability of hand hygiene facilities	Cleaning measures in place to limit exposure; schedule for daily cleaning and disinfection	Create a checklist for parents/staff to decide whether they can go to school; daily screening for history of fever	Use signage for hand washing and Physical distancing	N/A	Ventilation measures in place to limit exposure; clean, natural ventilation	Frequent cleaning	Limit mixing of classes and groups for after-school activities	Talk to someone you trust, like parents or teachers
American Academy of Pediatrics (AAP)	Keep children home if they have symptoms of infectious illness	Desks 3–6 feet apart (elementary); desks 3–6 feet apart (elementary) Avoid close physical proximity to adults and students	Worn by all students over 2	Frequent hand washing with soap and water	Use of EPA approved disinfectants	Adequate and timely COVID-19 testing resources must be accessible	N/A	For personnel and secondary schools	Inspect HVAC systems	N/A	Limited	Schools should provide resources; resources on website
Centers for Disease Control (CDC)	Keep children home if they have symptoms of infectious illness	6 feet from others whether inside or outside	2 years old and up	20 seconds with soap and water or alcohol-based hand sanitizer	Routinely clean and disinfect high touch surfaces	Should be done by medical personnel not at school	Posted in highly visible locations	Install when distancing is not possible; on floors for distancing	Open windows when weather allows; use child safe fans; improve central air filtration	Limit use; disinfect shared objects; remove soft surfaces; separate student supplies	Avoid team-based practice of indoor sports; clubs should be virtual	Resources online
United Nations International	Students to stay home	1 metre between everyone	Wear if school recommends	20 seconds with soap and water	Daily cleaning and	Daily screening for temperature	Use signs, ground markings,	N/A	Move lessons outdoors or	N/A	Limit mixing of classes for	N/A

(continued)

Table 3.2 (continued)

Organization	Illness	Distancing	Masks	Hand washing	Cleaning and disinfecting	Testing and screening	Signs	Barriers	Ventilation	Shared objects	Organized activities	Emotional support
Children's Fund (UNICEF)	and self-isolate if ill	present at school; 1 metre between desks; stagger recesses and lunch		or alcohol-based hand sanitizer	disinfecting of high touch surfaces		tape, barriers to maintain 1 metre around entrances		ventilate rooms		after-school activities	
Healthy Children Organization (HCO)	School nurses take temperature if ill; specific area to separate or isolate sick students	Desks 3–6 feet apart	Adults and students wear masks	Frequent hand washing with soap and water	Cleaning and disinfecting of high touch surfaces	Diagnostic testing is recommended when someone has COVID-19 symptoms	N/A	N/A	N/A	N/A	Outside and spread out	Schools should provide support

Table 3.3 Checklist for re-opening schools

(1) Form a COVID-19 response team	(5) Compose protocols for	(6) Keep abreast of updates
(2) Set parameters for learning	Hand hygiene	(7) Adjust as necessary
Online	Respiratory etiquette	
Hybrid	Physical distancing	
In-person	Use of masks	
(3) survey facility for risks	Cleaning and disinfecting	
Cleanliness	Ventilation	
Air flow	Testing and screening	
Ventilation	Exhibiting symptoms	
Foot traffic	Returning to school after sickness	
Space size	Classroom set up	
(4) consult health authorities	Sharing of materials	
WHO	Use of barriers	
CDC	Signs in school	
UNICEF	Organized activities	
Government guidelines	Transportation	
State guidelines	Meals	
Local guidelines	Visitors	

reopening during the pandemic based on WHO, AAP, the CDC, UNICEF, and HCO guidelines. The first step is to form a response team consisting of leadership team members, health personnel, teachers, and parents who will set the parameters for the learning model to be followed and write school site protocols. They survey the facility for risks and consult the major health organizations’ suggested protocols (see Table 3.2), determining which protocols fit their specific needs. The checklist is detailed in Table 3.3.

Given the drastic changes required by these reopening protocols, it is vital to document the threats posed to developmentally appropriate teaching methods as they occur. While the value of DAP is well-documented, the stringent COVID-19 protocols in place may prevent teachers from incorporating appropriate practices. To shed light on these challenges, this chapter assesses the impacts of school reopening guidelines, informed by these high-level protocols, on classroom practices.

Methodology

The main purpose of this study was to understand the challenges surrounding school re-openings in the COVID era, and how they impact early childhood educators and threaten DAP. In this section, the research methodology is presented by describing the mixed methods approach used for the study, the sampling procedures used to

collect the data, descriptive statistics about the sample, and how the data were analyzed.

Methodological Approach

The study used a mixed-methods approach integrating autophotography (Glaw et al., 2017; Rose, 2016), narrative analysis (Bold, 2011), social media analysis (Batinca & Treleven, 2014), inductive content analysis (Glaser & Strauss, 1967), and descriptive statistics. Aware of the fact that access to classrooms remains tightly controlled and teachers are under tremendous pressure due to COVID-19 protocols, I used social media posts to analyze early childhood educational climates. A substantial but growing body of literature supports the use of social media for academic research as it provides a window into teachers' lived experiences, allowing access to the unprompted feelings, opinions, reactions, changes, and discussions about the pandemic. The wealth of data available on social media websites offers a dynamic evidence base of human actions, reactions, and behaviors (Batinca & Treleven, 2014). Qualitative researchers are increasingly using visual images to explore participants' experiences and meaning-makings (Glaw et al., 2017; Rose, 2016), particularly because images allow researchers to create multiple realities which are socially and culturally influenced and situated in a specific time and space (Frith et al., 2005).

Sampling Procedure

Purposive sampling was used to source photographic and textual data from Facebook and Twitter, using the search terms: "early childhood COVID," "kindergarten teacher," "preschool COVID," "kindergarten reopening," "kindergarten teacher COVID," "teaching during COVID," "kindergarten COVID," "reopening schools," "COVID classrooms," "early childhood classroom COVID," "early childhood teacher pandemic," and "kindergarten COVID protocols." After initially finding hundreds of photographs, 135 images were identified using the following criteria: they must show early childhood classrooms, relate to changes due to COVID-19 protocols, and depict classroom teaching experiences during the pandemic. Images were excluded that had poor image quality or had incongruence between text and image. Figure 3.2 shows the classroom types represented in the sample.

Descriptive Statistics

Descriptive statistics were used to tabulate the frequency of the following trends in the sample: ethnicity of students, ethnicity of teachers, location, country of origin,

Fig. 3.2 Classroom type

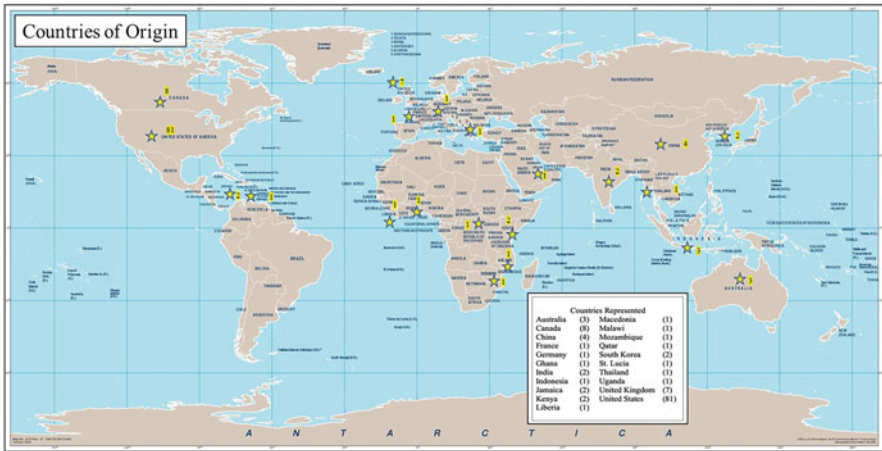
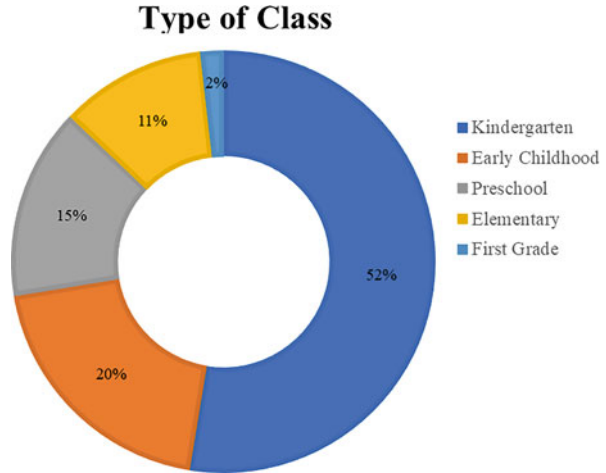


Fig. 3.3 Countries of origin of posts. (United Nations, 2020)

grade level, source, voice, and intended audience. Figure 3.3 details countries of origin of the posts and shows the frequency of posts per country.

Descriptive statistics were also calculated for teacher and student ethnicities. Teacher ethnicities were overwhelmingly Caucasian, while student ethnicities were somewhat more diverse, as shown in Fig. 3.4.

Data Analysis

Photographs were analyzed using an iterative, layered analytical approach, first, analyzing the photographs for form, color, foreground, and background (Museum of

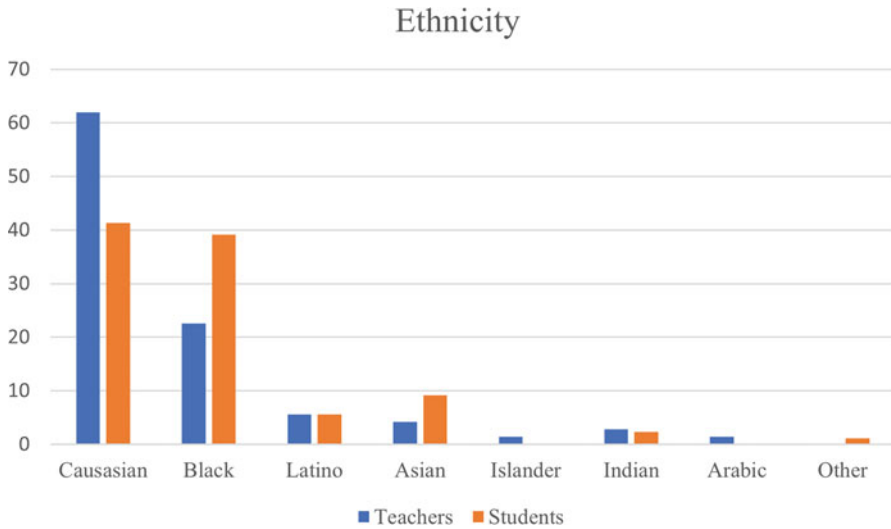


Fig. 3.4 Ethnicities of students and teachers

Photographic Art, 2021). Next, the production, perspective, content, and contextual information were analyzed and recorded in researcher notes that generated lists of reaction terms using discourse analysis (Rose, 2016). At the next level of analysis, keywords were used to label the text, and these were compared with the reaction words from researcher notes. Word frequencies of the textual data were compared to my reaction words using Microsoft Excel, allowing for triangulation of the data and analysis of the images more deeply. To maintain intercoder reliability when interpreting data, 43 images were analyzed by an independent researcher. The agreement rate was 90.7%, with 39 of these codes identical, whereas 9.3% were different. Using constant comparison (Glaser & Strauss, 1967), the 150 pages of images, reaction words, and keywords were grouped by commonalities, comparing each interpretation and finding with existing findings. Using a narrative approach (Bold, 2011), the images and text were probed for impressions, opinions, and beliefs to gain an understanding of how early childhood teachers perceive teaching in the COVID era. This approach yielded four over-arching themes described in the findings. The phases of coding and analysis are further described in Table 3.4.

Findings

Four salient themes emerged from the data: Heroes, Victims, Sacrifices, and Survivors. The theme of Heroes portrays the teachers who lost their lives to this virus, warriors who face the virus daily, and fairy-like pixies who are impervious to death. Another theme was Victims, which represents dangers and loss to the disease. The

Table 3.4 Phases of coding and theme development

Phases of coding and theme development									
Phase 1: Analyze photos for perspective									
How far or close is the viewer from the subject in the image?	Is the subject being viewed from a high angle (bird's-eye view), eye-level, low angle (worm's-eye view)?								
View -angle (superiority/inferiority, strength/vulnerability, engagement, creativity), horizontal (detachment, disengagement)									
Phase 2: Visually analyze photos									
What are the most important visual elements in the image? How can you tell?	Can the image be looked at in different ways?								
What meanings are conveyed by design choices?									
What information accompanies the image?									
Phase 3: Analyze the content of the photos									
Race of teachers	Active students	Active or passive teachers	What do you see?	What is the image about?	Are there people in the image? What are they doing? How are they presented?	Which country is it from?	Age/grade level of students	Inside or outside	How is the image composed? What is in the background, and what is in the foreground?
Phase 4: Analyze the textual information accompanying the photos									
Does the text change how you see the image? How?		Is the textual information intended to be factual and inform, or is it intended to influence what and how you see?		Whose voice is represented?		Intended audience			
Phase 5: Record my reaction words									
Phase 6: Draw out key words from text									
Phase 7: Compare key words from text to my reaction words									
Key words from Text		Reaction words							
* words from both groups were counted and compared to each other									

(continued)

Table 3.4 (continued)

Phases of coding and theme development						
Phase 8: Analyze photos against each other and record emergent themes; search for commonalities						
Teacher as invincible	Teacher in danger	Teacher as fallen hero	Country or school as covid winner	Normalizing COVID	Making COVID cute	Teacher as adaptable
Learning as an island	Student as office worker in a cubicle	Teacher as savior	Learning in nature	Child as COVID safe	Death of teachers	School as a prison
School in danger	Student in danger	Learning as loss	Student as victim	Child as magical	School as hope	
Phase 9: Continuously compare photos to each other and to themes; refine metaphors						
Heroes			Victims		Survivors	
Phase 10: Inter-rater reliability: A university researcher not involved in this study analyzed a random sampling of 43 images using the above analytical framework. The agreement rate was 90.7%.						

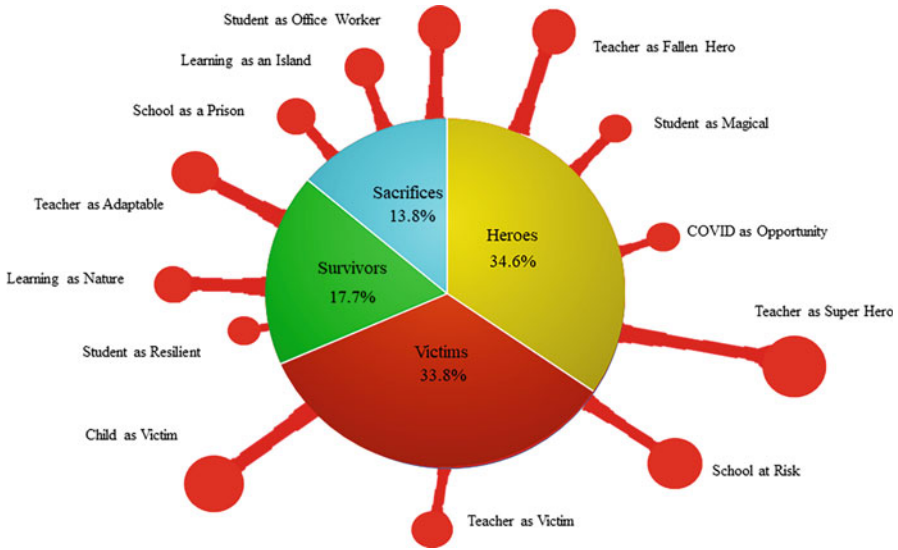


Fig. 3.5 Themes and metaphors by percentage

theme of Sacrifices represents what we gave up to fight the deadly virus. Finally, Survivors represents a more sustainable way of living with the new normal, emerging from the voices of those who have transcended the virus and all the changes it has brought, and are now rebuilding and continuing to thrive. The overarching themes, metaphors, and their frequency in the data are detailed in Fig. 3.5.

Heroes

The theme Heroes represents 34.60% of the overall dataset. There are many heroes of the COVID era – doctors and nurses who risked their lives daily to save lives – first responders put their lives on the line, rushing to the aid of COVID-19 victims. Teachers also see themselves as heroes of this pandemic. The images show teachers dressed as heroic figures like Wonder Woman and Rosie the Riveter, balancing on circus balls, winding their way through obstacle courses, spinning plates on their heads, and teaching online from a hospital chair receiving chemotherapy. Table 3.5 shows the subthemes of Heroes by percentage.

Teacher as Super Hero

The data demonstrated that early childhood teachers are under tremendous pressure to perform during the pandemic. Teachers’ voices indicate that they are expected to

Table 3.5 Subthemes of heroes by percentage

Heroes	% of total entries	% of theme
Teacher as Super Hero	20.17%	58.33%
Teacher as Fallen Hero	8.65%	25.00%
Student as Magical	3.61%	10.42%
COVID as Opportunity	2.16%	6.25%
Total	34.60%	100%

master online and hybrid teaching, juggle a continually changing world of teaching online, in-person, and hybrid models, change their teaching styles, re-imagine classroom setup and learning environments, and accommodate ever-changing COVID-19 protocols, all while staying healthy enough to teach. One post read, “Thinking of those hard-working teachers out there going above and beyond the call of duty. You are impressive and appreciated. We know things are tough, but there will be an end to this COVID-style of teaching as this year goes on” (NB Teacher Wellness, 2021). In the COVID era, early childhood teachers continue to do their best to reach our youngest learners daily.

Teacher as Fallen Hero

Early childhood teacher death from COVID-19 is as serious a concern as captured in the theme of Teacher as Fallen Hero. Tragically, many early childhood teachers have lost their lives to COVID-19. Child care worker and teacher death weigh heavily on the minds and hearts of teachers, “One death is too many. We cannot teach from the grave” (Faces of COVID, 2021). As opposed to the Victims theme, I chose to view these perspectives in that of Heroes – the heroes and heroines who represent the tragic loss of human life to COVID-19. Voices express love, admiration, adulation, and sadness for those lost, “She loved helping people, so I think that’s why she was such a good teacher and friend. She would do whatever it took it help a child learn or feel included” (Dickerson, 2021).

Student as Magical

In contrast to fallen heroes, another theme that emerged was that of children as superheroes, fairies, and mystical creatures donning wings to practice social distancing and wearing masks adorned with shiny noses. Early care teacher and staff concern supports the images, “you can’t teach from the grave, schools are not places where children are magically immune from the virus and teachers are dying” (Safeteachy, 2021). Conflicting messages about COVID’s impact on young children have led to confusion among parents and staff, and placed young children in an unwarranted position of heroes impervious to disease, “0-4-year-olds can’t catch and spread COVID and all nursery and preschool staff are magically immune and all their families too?” (Lockey, 2021).

COVID as Opportunity

A small but surprising finding was the subtheme of COVID as Opportunity. The pandemic has widened educational achievement gaps and exposed privilege. Due to the pandemic, the world became more aware of pre-existing inequalities in education and lack of technology in homes. Because of this new awareness, some of the world's most marginalized learners are now gaining attention, services, and the most basic of human needs, "The COVID pandemic disproportionately impacts students from systematically marginalized communities. This plays a role in their cognitive and academic development" (National Center for Learning Disabilities, 2020). There is evidence that some schools received additional funding, new fixtures, and updated curricular materials due to the pandemic. One post revealed, "Passing rate of students increased from 40% to 90% in Mtengeza Primary School" (Petursdottir, 2020). Due to the virus, some schools are now receiving support to provide basic services like electricity and running water.

Victims

The theme of Victims encompasses many losses beyond the most tragic – the lives of students, teachers, and staff. This theme represents 33.8% of the dataset. The pandemic's multitude of casualties includes loss of mental health, the right to teach, the right to learn, and DAP – all victims of the COVID-19 pandemic. Table 3.6 demonstrates the subthemes of Victims by percentage.

Child as Victim

Teachers' posts indicate that there are massive concerns for children re-entering schools during the pandemic. Juxtaposed with Child as Magical and immune to the virus, the theme of Child as Victim reveals that child contraction of COVID-19 and possible death are huge concerns. WTXL News's article was reposted on Twitter, "More than 11,000 children test positive for Coronavirus in Florida" (Jacqueline, 2020).

There are concerns of teachers spreading the virus to children and that children contract and spread COVID-19, "We have several teachers in my district who caught COVID from kids, and there's a kindergarten child in the hospital with COVID-

Table 3.6 Subthemes of victims by percentage

Victims	% of total entries	% of theme
Child as victim	14.38%	42.55%
School at risk	12.95%	38.30%
Teacher as victim	6.47%	19.15%
Total	33.80%	100.00%

related Kawasaki's syndrome" (BDubs, 2020). Parents are also concerned about children in quarantine, "I am angry and sad. My five-year-old grandson was put in quarantine yesterday because stupid parents of a classmate sent their kid to kindergarten even though the child's COVID test was pending. Test positive. My grandson and 20 other five-year-olds are quarantined for Christmas" (Butler, 2020).

Children are victims of many interrelated losses. Loss of mothers. Loss of fathers. Loss of grandparents. Loss of sisters. Loss of brothers. Loss of friends. Loss of teachers. Death and the fear of it surround our children daily. Further, children have lost many of the fundamental rights of childhood to coronavirus. They have lost the right to feel safe and the right to play.

School at Risk

Early learning centers are also victims of the pandemic. Haunting images of empty classrooms, overturned chairs on top of desks, and dark hallways abound. The data indicates that many childcare centers have shut down, "Childcare advocates and early childhood educators are calling on the province to provide more support for the childcare sector, which is struggling to deal with reduced enrollment and rising COVID-19 infections" (AECEO, 2021). There is a shortage of staff and teaching personnel, "Childcare centres across Australia are suffering staff shortages, which have been exacerbated by the COVID crisis" (CPD, 2021). Images of schools as voids are plentiful, leaving many to wonder, "Does early childhood education still matter during COVID-19?" (The Jakarta Post, 2020).

Teacher as Victim

Many early childhood teachers reported being afraid to go to work, fearing for their lives and that of their families, resulting in the theme Teacher as Victim. One teacher posted, "I have never felt more like quitting my job ever in my life than I do today. And that includes when I did quit my job. This is too much. It's too hard. It's too dangerous. The teachers are not alright" (Clemons, 2021).

Early childhood teachers miss their students and are concerned about learning loss due to quarantines, but they also fear for their own lives (Crawford et al., 2021). They are exhausted and emotionally spent – many separated from their families and friends and without support. Personal stories of tragedy were widespread: "I just had to tell my mum I won't be seeing her for a while. She's single, a widow and lives in the country. But with schools still open, I can't guarantee her safety if I visit. She's a cancer survivor, almost 65. She lives alone and I'm her only child" (Wescott, 2020).

Teachers are stretched mentally, physically, and financially: "A teacher I worked with has just died of COVID. I am NOT OKAY! My face shield arrived today, which I purchased. I am so angry. She was teacher of the year, too. WE ARE NOT OKAY! Does anyone care?" (LaRoque, 2021). Teachers are losing jobs, income,

and livelihood. They are losing mental health, too, “I am tired of being tired . . . I think you put it best “. . . not seeing the end. . .” is getting to me!” (Madrid, 2021).

Sacrifices

The theme of Sacrifices encompasses what schools have given up to accommodate COVID-19 protocols, representing 13.8% of the total dataset. Often, these casualties are necessary evils of survival. Each sacrifice directly relates to the education and care of young children and changes made to classrooms, learning environments, and teaching practices to accommodate the virus and resulting protocols. Table 3.7 displays the subthemes of Sacrifices by percentage.

Student as Office Worker

Photographic data revealed images of self-contained learning cubicles. Early childhood teachers, proud of their creative efforts to distance and protect students, construct transparent makeshift walls around students’ desks made from shower curtains, plastic, and plexiglass, “Not sure if teacher friends need ideas but. . .she used PVC pipe and clear plastic shower curtains from the Dollar Store – cost her around \$100 to do her room” (Aguilar, 2020). They divide clusters of four desks separated by clear plastic into small learning pods, “My mama is a kindergarten teacher and went to see her classroom today. She said they have the desks separated by plexiglass and nothing on the walls” (Brittany, 2020). Children are responsible for bringing their own materials, and work and learn alone, “To comply with COVID-19 regulations, each student carries their own supplies, face coverings are mandated for staff and encouraged for students, and activities where the children come into close contact are limited” (LesEnfants, 2020). Gone are the days of community materials and collaborative learning. Children perform solitary work in small plastic-surrounded cubicles.

Learning as an Island

Photographic data often revealed isolated learning areas taped off, with children and their materials remaining inside each island. This teaching method is the cause of

Table 3.7 Subthemes of sacrifices by percentage

Sacrifices	% of total entries	% of theme
Student as office worker	6.57%	47.62%
Learning as an island	3.92%	28.57%
School as prison	3.26%	23.81%
Total	13.80%	100.00%

great concern for some teachers, “The thought of kindergarten and social distancing is literally making me depressed” (Halpern, 2020). To make the new standard more acceptable for children, some creative teachers have placed sharks on the outsides of the islands, “Welcome to my classroom in 2020–21. . . trying to think outside the box to work with preschoolers on social distancing I have put them inside boxes aka ‘islands’” (Shilan, 2020). There are images of small children on chairs, not moving or exploring, but rather sitting obediently, atop their little chair islands. Teachers and parents express that this is an unrealistic expectation for young children, “I think the saddest part about this year is telling a child that he or she can’t play with another child because of social distancing. A huge chunk of preschool is about sharing, and these kids want to share and play and having them do individualized stuff is heartbreaking at times” (Christine, 2020).

School as Prison

The theme School as a Prison portrays images of a dystopian, jail-like setting, with students spread apart, lined up against walls as early childhood teachers desperately try to keep our youngest students safe by creating socially distanced areas. Children play and learn alone in a sort of solitary confinement, or sitting in hallways with their materials spread far apart, while others show children sitting on small gardening pads in taped-off areas in small “cells.” Textual data reveal the same sentiment. “Some of the youngest students returning to classes today in Anchorage will enter a dystopian classroom world, where they must kneel for hours on end on the floor while masked, and have no recess or art or physical expression” (Horowitz, 2021). This “new normal” for early childhood classrooms is often referred to as cruel or inhumane. “This is beyond CRAZY. It is cruel, inhuman, of Max Security prison quality” (Heinricks, 2021). Yet these teachers, childcare facilities, and schools of early learning are doing everything in their power to keep children safe, often while teaching against their own beliefs and pedagogies, “A kindergarten teacher said that her classroom setup looks like a combination of a prison and a cancer ward” (Danoff, 2020).

Survivors

The final theme arising from the data is that of Survivors – the ways in which early childhood educators, schools, and staff are surviving while adapting to the challenges of the COVID era. Survivors represent 17.7% of the dataset. Despite making necessary changes to comply with reopening protocols, many teachers uphold some developmentally appropriate practices. Rather than being put on a pedestal as heroes, these survivors are making small, sustainable changes. These students and teachers are doing what is required to survive, showing resilience, creativity, and grit. Table 3.8 displays the subthemes of Survivors by percentage.

Table 3.8 Subthemes of survivors by percentage

Survivors	% of total entries	% of theme
Teacher as adaptable	8.85%	50.00%
Learning as nature	7.24%	40.91%
Student as resilient	1.61%	9.10%
Total	17.70%	100.00%

Teacher as Adaptable

Juxtaposed to the Teacher as Superhero theme, the theme of Teacher as Adaptable showed teachers soldiering on through the prolonged reality of living with COVID-19, the ongoing changes, and the adaptations to teaching that are needed to survive in this everchanging world. Early childhood professionals worldwide have shown their dedication and commitment during the pandemic, finding sustainable ways of coping with the crisis (Crawford et al., 2021). Literally overnight, many Pre-K and Kindergarten teachers took learning online, clamoring to figure out how to teach developmentally appropriate, play-based learning through a computer screen (Crawford et al., 2021). They attended virtual training and workshops, collaborated with colleagues via social media websites, posted photos of their changes, and asked for advice into the void; they held playtime, snack time, and circle time virtually; they celebrated students' birthdays from their balconies, yards, and living rooms; they recorded themselves reading books and teaching lessons online. They held conferences with parents via Zoom, Skype, and Google Meet, even teaching at night to reach all families, "An example of thinking differently to meet learner & fam needs. . .night kindergarten class meets needs of working families during the pandemic" (Spencer, 2020).

Early childhood professionals were expected to quickly implement a plethora of new devices, websites, and tools to reach their learners (Crawford et al., 2021), "Currently listening to my wife (a kindergarten teacher in quarantine due to COVID in the class) teaching online. Today her kids get to visit the International Space Station in real time. It's making me want to dress up as an astronaut" (Hitel, 2020). Images of teachers' home teaching areas are common. An image showing a laptop and a pillow against a wall is accompanied by the text, "The home office while teaching kindergarten during COVID-19. Making it work!" (Slynn, 2020).

When allowed to re-enter their classrooms, teachers continued to adapt and change. They re-imagined their learning environments and set up play and learning areas according to new protocols while considering developmentally appropriate practices, "COVID numbers are out of control, but we are still fortunate enough to be teaching face to face. Raising up problem solvers in K!" (Schoeneck, 2020). They grouped students in learning bubbles and with rotating partners, sectioned off areas for play and rotated the toys in those areas, careful to keep toys out of rotation for a safe period before the children could use them again, and disinfected toys and surfaces frequently to keep children safe and provide the closest thing to normal learning they could offer. These survivors value play-based learning and the power of the child's imagination, "Individual play bins are better than no play at all. Today I

ate some ice cream and a hot dog, was invited to a birthday party, and was given a beautiful painting. Teaching primary really is the best...even COVID style!” (GillBaskwill, 2020).

These early childhood educators have adapted to the new normal while attempting to hold on to their beliefs about young children and how they learn and grow, “I am a kindergarten teacher. This is our 4th reopening of our school due to COVID-19. I was just informed that my new classroom will be the gymnasium. I need to make this space amazing for my students!” (Pongratz, 2020). They hold child safety and developmentally appropriate practices in a tenuous balance.

Learning as Nature

Early childhood educators are moving lessons outside to adapt to protocols while clinging to appropriate practices. Schools are tenting parking lots and taking advantage of fresh air and natural ventilation, using small swimming pools to create safe learning and play spaces, “Tenting our parking lot! Creating more outdoor spaces for our students this year will inspire us to connect and incorporate nature more into our curriculum” (Concord Hill School, 2020). Teachers are taking more nature walks, longer outside recess, and teaching outside to give students more freedom and incorporate more developmentally appropriate practices, “Happy to get outside with kindergarten for nature walks...students follow COVID safety protocols well but sometimes for a short moment students get excited to observe closely as a scientist would” (Pavlicek, 2020).

Student as Resilient

Whether online during distance learning or in-person in classrooms, young students have shown incredible resilience throughout the pandemic. During home learning, the youngest students adapted to online learning, learned new technologies, tuned in, turned up, and learned. Teachers’ voices illustrate their concerns for the mental well-being of young learners learning from home, “A heartbreaking morning. I’ve been teaching kindergarten virtually this year and I’ve been very lucky to have such a wonderful group of kind, smart and fun kids. They’ve made the most of this unfortunate situation due to COVID but today was a breaking point for a couple of them” (Huynh, 2021).

Many children have returned to schools under new protocols. They wear their little face masks, disinfect their little hands, sit alone behind dividers to eat, play solitary games, and learn alone. They come to school during a time when most of the world is terrified to leave home, smiling and eager to learn. The images show the twinkling eyes of children in schools and childcare centers, often behind oversized masks, “And just like that they adapt to a new reality. Children are incredibly resilient...” (Concord Hill School, 2020).

Discussion

This chapter has examined the impacts of COVID-19 protocols on developmentally appropriate practices in early childhood settings. By using a novel method based in textual and photographic analysis of social media posts and photographs, this chapter addressed the following research questions:

- What are the challenges surrounding school re-openings in the COVID era?
- How do these challenges threaten developmentally appropriate practices?
- What supports do early childhood teachers need to navigate the turbulent waters ahead due to the pandemic?

In answering these questions, the analysis revealed four salient themes in the challenges facing early childhood teachers: Heroes, Victims, Sacrifices, and Survivors. When comparing these themes to the tenets of DAP, it was found that adhering to even the most basic tenets of DAP has been impossible under stringent COVID-19 protocols and re-opening guidelines in place around the world. Using the COVID-19 protocols framework outlined in Table 3.2, it is clear that social distancing, grouping of students, use of materials, and access to facilities have the most impact on DAP. The analysis carried out in this chapter reveals four areas of DAP that are most impacted by COVID-19 protocols: play, environment, collaboration, and student agency. The chapter concludes by discussing these four areas of impact in light of the findings identified here and identifying how they contribute to current scholarly understanding and teacher practices to help inform re-opening in early childhood classrooms. Figure 3.6 illustrates the challenges to DAP due to COVID-19 protocols.

Challenges Surrounding School Re-openings

Teachers, schools, and students faced many new challenges when learning returned to campuses across the world (Crawford et al., 2021; Timmons et al., 2021). In order to adhere to health protocols, early childhood education changed dramatically. Learning environments, teaching strategies, and student learning had to be adjusted to accommodate student and teacher safety (Timmons et al., 2021).

Play-Based Learning Is Difficult Due to Protocols

Play helps children develop relationships, language, problem-solving skills, and imagination (Beaty, 2009; Ferreira et al., 2018). Learning through play is central to the curriculum in early childhood classrooms, and educators provide multiple opportunities throughout the schedule for investigations, explorations, and interactions, using play as a vehicle for authentic assessment (Motta et al., 2012; Timmons

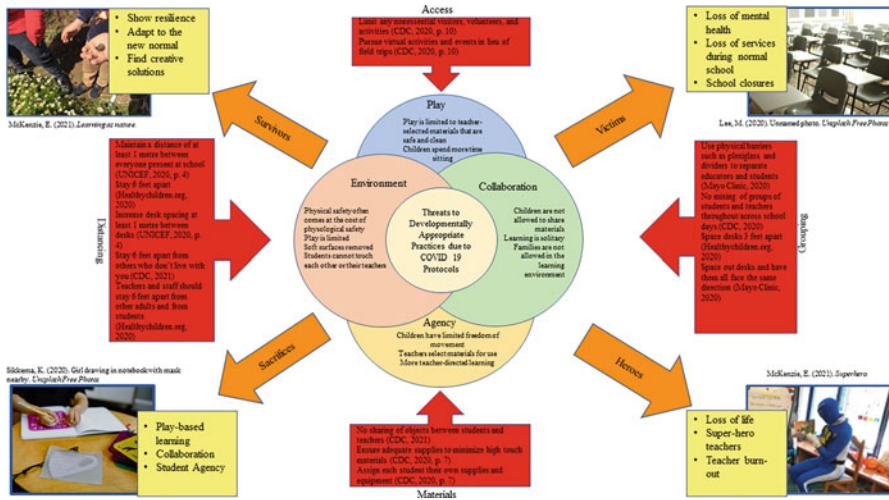


Fig. 3.6 Threats to DAP from COVID-19 protocols

et al., 2021). Curricular content is integrated and taught through play-based learning (Ferreira et al., 2018; Parker & Thomsen, 2019).

The findings of this chapter suggest that play is one of the greatest sacrifices of COVID-19 protocols. Necessary measures such as the segregation and distancing of students (UNICEF, 2020, p. 4) make play-based learning problematic. It is very difficult to engage in creative, open-ended, engaging play with very few or only your own materials, as required by materials restriction protocols (CDC, 2021). Play is also impacted by grouping, since the developing child needs playmates to engage in creative play and games with rules (Yogman et al., 2018). When children are spaced six feet apart (CDC, 2021) or confined to their own desks behind a plastic shield (Mayo Clinic, 2020), as shown in the learning as an island theme, they cannot engage in meaningful play with peers. The data indicate that some creative teachers have learned to adapt to the new normal, making small play boxes for individual play, and having toy rotations to allow for playing with certain toys on certain days. The findings also revealed that other teachers have moved learning outside, showing resilience and ingenuity to keep their students safe. Research indicates that outdoor learning can benefit children’s physical activity, mental health status, social development, and academic achievement (Becker et al., 2017).

Collaboration Is Challenging for Students and Teachers

Another sacrifice of the pandemic is collaboration. Prohibiting groups of students from playing and learning together impedes collaboration, for example when children sit at their own desks facing the same direction as seen in the theme of Sacrifices. Further, collaboration with parents is difficult when parents are not

allowed in buildings or classrooms (CDC, 2021, p. 10). With field trips canceled (CDC, 2021, p. 10), teachers cannot collaborate with the larger community or take children out to learn about their communities. As seen in the data, many teachers are making use of nature walks and public parks to allow for adequate spacing of children in the open air. Children cannot work in small groups or share materials during COVID-19 restrictions (CDC, 2021), further hampering collaborative learning. Physical barriers prohibit children from collaboratively interacting with materials, demonstrated in the theme Learning as an Island, which makes peer learning difficult (Mayo Clinic, 2020). Parents are not allowed in schools or classrooms, severing collaboration with families (CDC, 2021, p. 10). The data reveals that some heroic teachers meet with parents online late into the night to accommodate family needs during this uncertain time.

Student Agency Is Altered

Another Sacrifice is student agency. The draconian physical distancing measures in place have severely limited child agency, namely, their freedom to choose how and with whom to learn due to spacing and material availability. Heroic teachers set up classrooms by adhering to stringent rules to keep children safe (CDC, 2021). Though children are not allowed to co-create their learning and play areas, some resilient students found ways to collaborate with each other using plastic dividers. Other students were able to build their agency through finding creative ways to follow COVID-19 protocols. Children made hand-holding cloths where each child could hold one end of a washrag to feel connected to friends. They made up classroom jobs to help each other follow safety protocols such as Hand Sanitizer Helpers who passed out sanitizer to their classmates, and Mask Helper who reminded friends to cover their noses or wear their masks properly. Students made posters showing how to wash hands or wear masks, serving as helpful reminders for safety, and they came up with novel ways to greet each other such as fist and elbow bumps.

COVID-19 Protocols Constrain the Learning Environment

The chapter's findings illustrate that risk of school closure was a constant concern. During school closures, students lost learning gains, food, mental and physical health services, and connections with friends and the community (McKenzie, 2021; Timmons et al., 2021). Opening schools and keeping them open for students was a chief concern.

Though COVID-19 is not considered a "child's disease" because the fatality rate is low compared to adults who contract the virus (Spaull, 2020), teachers were concerned for student safety and the threat of children catching and spreading COVID-19. The CDC (2021) reported that children who contracted the virus had mild symptoms or were asymptomatic.

To keep students safe as schools reopen, teachers must adhere to necessary but stringent COVID-19 protocols (CDC, 2021), which – as this chapter demonstrates – inherently impact the learning environment. Limiting materials and using individual items (CDC, 2021; Healthy Children, 2021) does not foster the sharing and caring environment characteristic of DAP classrooms (McKenzie, 2021). Constant reminders of COVID-19 protocols, telling children not to touch each other, and preventing them from playing together inhibit a positive group climate where everyone feels safe and secure.

Opportunities Arise

This chapter has demonstrated that teachers, students, schools, and teaching practices have suffered during the pandemic. There are many victims and losses, from human life to appropriate teaching practices. The pandemic has seen heroes as well – those who taught online while receiving chemotherapy and those who lost their lives. Teachers made sacrifices. Teachers taught from home. Teachers changed their teaching to ensure the safety of our students. The most significant finding of this study is that resilience – the ability to overcome, adapt, and bounce back (Masten, 2013) – is key to teachers and students surviving tragedies such as the COVID-19 pandemic (McKenzie, 2021). In a review of the research on teacher resilience, Beltman et al. (2011) found that the personal attributes of teachers were key to their ability to bounce back. These include the capacity for altruism and a robust intrinsic motivation to teach (Beltman et al., 2011) Coping skills such as the ability to seek help when needed and confront problems head-on were additional factors that contributed to teacher resilience (Beltman et al., 2011) Research on resilience in children overwhelmingly supports the idea that a secure connection with one primary caregiver helps a child rebound from tragedies (Bronfenbrenner, 2005; McKenzie, 2021). The Survivors in this current study were able to use their coping skills, confront problems, and find creative solutions. Teachers took learning outside where it was safe for children to learn in the fresh air, students came up with their own strategies to cope, and schools re-envisioned learning.

Strengths and Limitations

The strengths of this chapter include shedding new light on the extent of the impact and ongoing effects of the COVID-19 pandemic on early childhood education and care from a vast sampling around the world. Using the latest DAP position statement (NAEYC, 2020) aligned with the most recent NAEYC professional standards (NAEYC, 2019), this chapter contributes to research on DAP while informing the application of the most recent DAP standards to real-world settings. This chapter also contributes an innovative way to collect non-invasive research data via

photographic “interviews” collected from social media sites. The analysis conducted here thereby offers methodological novelty while providing a useful tool during a crisis when classroom access is limited. This methodology can prove useful as a research tool during the current pandemic and future crises. Most importantly, this chapter offers guidance for maintaining appropriate pedagogy during the current crisis and beyond.

The study faced several limitations, including an over-representation of classrooms in Global North and white race/ethnicity contexts, implying that future research should delve further into these issues in Global South classrooms and among students of color. Another limitation is the inability to follow up with participants to member-check results. Future research could employ survey-based methods to investigate the long-term impacts of COVID-19 protocols and gauge teacher and student perceptions of teaching and learning in the COVID era in geographically and culturally diverse contexts.

Implications

This chapter has several important implications for research and teaching practices, including a checklist to inform ongoing daycare and school reopening guidelines and an analytical framework informed by DAP that documents the many challenges of teaching in the COVID era for early childhood educators. Early childhood teachers and students are learning to change and grow from the challenges presented by the pandemic (Crawford et al., 2021; McKenzie, 2021), and they will need to continue to adapt and find meaningful and safe ways to incorporate developmentally appropriate practices into their teaching environments. As the pandemic lingers, COVID-19 protocols will continue to change as new research is unearthed, and schools and school boards will need to keep abreast of policy changes as they occur. Due to the unprecedented length of the current pandemic, teachers (Eadie et al., 2021) and students (Egan et al., 2021) will need long-term support from administration, parents, and school counselors, including wellness activities built into the day for both students and their teachers, safe spaces for talking about concerns with trusted adults, opportunities to express their feelings in multiple ways, and time to adjust to the dramatic changes in their young lives.

Conclusion

The chapter explores teachers’ perceptions of returning to school under dangerous conditions, exploring both the immediate health and safety risks as well as the long-term impacts on teaching and the loss of developmentally appropriate practices. The analysis presented here sheds light on the challenges surrounding school re-openings

in the COVID era, threats to developmentally appropriate practices, and necessary supports to early childhood teachers to navigate the turbulent waters ahead.

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<i>Conflicts of interest/Competing interests</i>	The author declares no competing interests.
<i>Availability of data and material</i>	Not applicable.
<i>Code availability</i>	Not applicable.
<i>Authors' contributions</i>	EM is the sole author for this chapter.
<i>Ethics approval</i>	Not applicable.
<i>Consent to participate</i>	Not applicable.
<i>Consent for publication</i>	All images included in the chapter are from previously published online sources, which are credited in the chapter.

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Chapter 4

Lessons from the COVID-19 Pandemic: A Qualitative Study of Government Policies Relating to the Early Childhood Sector Across Ten Countries



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The COVID-19 pandemic has resulted in monumental changes to children’s education throughout the world. This chapter focuses especially on Early Childhood Education and Care (ECEC) for children aged birth to 8 years across 10 countries: Australia, Canada, Chile, Denmark, England, Germany, Greece, Ireland, Italy and Portugal. In discussing these countries, the paper uses the term “early childhood

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services” to encompass all of types of service provision, which vary across the world, encompassing pre-schools, kindergarten, elementary education and often the early years of primary school and comprising different age ranges from children aged birth to 8.

The World Bank (2020) describes the pandemic as an unprecedented global shock to education, with the United Nations (2020) suggesting that children risk being the biggest victims of COVID-19 in terms of the potentially profound effects on their well-being. As such, the pandemic disrupts every aspect of children’s lives including their health, development, learning, behaviour, their families’ economic security, their protection from violence and abuse and their mental health (World Economic Forum (WEF), 2020). Drawing upon an extant body of research, this chapter, which examines government responses across the 10 countries mentioned, begins with a discussion of the indirect effects of the COVID-19 pandemic on children’s lives.

Impact of the COVID-19 Pandemic on Children

According to the United Nations International Children’s Emergency Fund (UNICEF, 2020a) the pandemic has affected children’s lives in multiple ways, with 99% of the world’s 2.36 billion children having their movements restricted, and 60% experiencing some form of lockdown (Gromada et al., 2020). As countries have imposed COVID-19-related restrictions to curb the spread of the virus, disruptions to everyday life mean that many young children have been unable to attend their early childhood setting or school. They have been socially isolated from friends, in educational contexts, in neighbourhoods and communities, and are

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entirely reliant on their caregivers for nurturing care and meeting all their developmental needs (UNICEF, 2020a).

A combination of lockdown, social distancing requirements, and home confinement has resulted in children becoming more vulnerable to mental health issues (Ravens-Sieberer et al., 2020), including loneliness and social isolation (Egan et al., 2021), obsessive compulsive disorders (Tanira et al., 2020) and even post-traumatic stress (Loades et al., 2020). Moreover, children have experienced a significant decline in physical activities, outdoor time, an increase in screen time (Moore et al., 2020) and sleeping time (Liu et al., 2020).

Their families' changing socio-economic circumstances has also affected children's experience of the pandemic. Many families have experienced job and income loss and financial insecurity (Gassman-Pines et al., 2020; Griffith, 2020) all of which affects children's lives (Organisation for Economic Co-operation and Development (OECD), 2020). Moreover, Roos and Tomfohr-Madsen (2020) report that parents were more likely to suffer from burnout because of an imbalance between risk (growing demands and parental duties during the pandemic and during lockdown) and availability of resources (time and support from family and friends but also educational institutions such as early childhood settings; Griffith, 2020). Accordingly, various stressors, including limited physical, social and economic resources, and stretched emotional resources have created a vicious cycle, which impairs parental ability to engage with children at a time when the stress experienced by children require more parental resources than previously (Brown & Doom, 2020).

As such, educational settings play a critical role in supporting children's learning and development, redressing educational disadvantage and providing them with a safe, stable and nurturing environment (Berger & Martin, 2020). However, in addition to the detrimental effects to families and children of disruption to essential health, prevention and response services in many countries (UNICEF, 2020b; World Health Organization, WHO, 2020), education services including early childhood have also been reduced or even withdrawn for a significant time span.

As discussed in this chapter, government choices during the pandemic determine how it affects children and their families, and reveals much about the perceptions of children and their early childhood professionals from a political, social and economic stance; throughout this chapter, we deliberately use the term "early childhood professionals" to recognise those professionals working with young children given that different terms (such as teachers, educators) are used in different countries. For instance, the burden of juggling children's care and education with working from home has fallen squarely on parents' (mostly mothers') shoulders during the pandemic (Gromada et al., 2020; Power, 2020). As the crisis deepened, the indispensability of early childhood education and care (ECEC) as a mechanism to restart the economy by supporting parents' return to work became visible (Moloney, 2020). Perhaps because of this strong focus on ECEC as an economic tool, governments across the 10 countries discussed in this chapter tended to overlook the importance of early childhood education in mediating children's learning and development, notably their socio-emotional development, during the current crisis.

Methodology

The findings presented in this chapter result from a qualitative collaborative auto-ethnographic study, involving researchers in Australia, Canada, Chile, Denmark, England, Germany, Greece, Ireland, Italy and Portugal. Using an auto-ethnographic approach, the authors draw upon government documents and self-reflection to determine the impact of the COVID-19 on early childhood settings in the 10 countries studied. The following section describes the research design, ethical considerations and the process of data analysis.

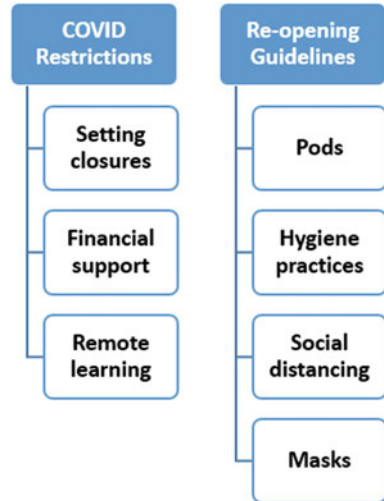
Research Design

The effects of the pandemic on children's lives differ geographically and are dependent upon country-specific measures (OECD, 2020), thus, justifying a cross-country comparison. In initiating this study, the convenors of the European Early Childhood Education Research Association (EECERA) Professionalisation Special Interest Group (P-SIG), Margaret Sims, Mary Moloney and Antje Rothe, invited P-SIG members to collaborate on an auto-ethnographic research paper. P-SIG members from 10 countries – Australia, Canada, Chile, Denmark, England, Germany, Greece, Ireland, Italy and Portugal – responded to this invitation and collaborated to conduct the research project.

As a qualitative research method, auto-ethnography enables researchers to draw upon their own experiences to understand a particular phenomenon or culture (Mendéz, 2013) by engaging them in cultural analysis and interpretation (Chang, 2008; Ellis et al., 2011). In the present study, each researcher had direct experience with the consequences of the COVID-19 pandemic for young children in their respective countries as well as governmental responses to the crisis. The purpose of the study was to share our reflections on how COVID-19 affected the early childhood sector and to identify priority areas for the future of ECEC. Drawing upon official government documents and our experiences in our respective countries, we shared our reflections of the first lockdown (March–June 2020). As illustrated in Fig. 4.1, government documents relating to COVID restrictions and guidelines for re-opening affected our reflections, leading to several overarching thematic areas, which were further refined during an iterative process of analysis, discussed later.

Utilising an interpretive ontology (Lin, 2015), which assumes that reality consists of people's subjective experiences of the external world, and is socially constructed, the researchers sought not only to discover reality but also to share understandings through each other's knowledge and experiences (Schwartz-Shea & Yanow, 2012). Official political documents constituted the main data source that was complemented by individual author reflections. For this purpose, every author from each participating country identified national policy documents and directives relating to their respective country that met the following criteria: (a) published right before or

Fig. 4.1 Overview of government documents and initial thematic areas



during the first lockdown in 2020 and (b) addressed the pandemic with regard to the early childhood sector. In this study, all authors take the stance that reality is interpreted individually and differs for participants depending on their experiences in their respective countries. Thus, they position their reflections as their own individual “truths” arising from their experiences in the world (Adams, 2007), and share their “truths” with each other through the English language, yet have the collective aim of constructing a shared understanding of how COVID-19 affected the early childhood sector across the 10 countries studied.

Data Analysis

Following receipt of initial reflections from each researcher, the two principal authors combined the reflections into an initial draft document and undertook initial thematic analysis. In qualitative research, thematic analysis is the process of “systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set” (Braun & Clarke, 2012, p. 57). Hence, rigorous analysis interrogates, interprets and makes sense of the data (Braun & Clarke, 2012) to address the research question and to give meaning to an issue or phenomenon. Using an iterative process, the two authors engaged in an initial process of inductive analysis, coding the reflections without trying to fit them into a pre-existing coding frame. In the first instance, the authors divided countries into two groups, depending on whether settings closed completely or remained open to children of workers categorised as essential by that country and vulnerable children and families. In the first group, comprising Chile, Greece, Ireland and Italy, most settings closed completely for all groups of children and their families over a prolonged period

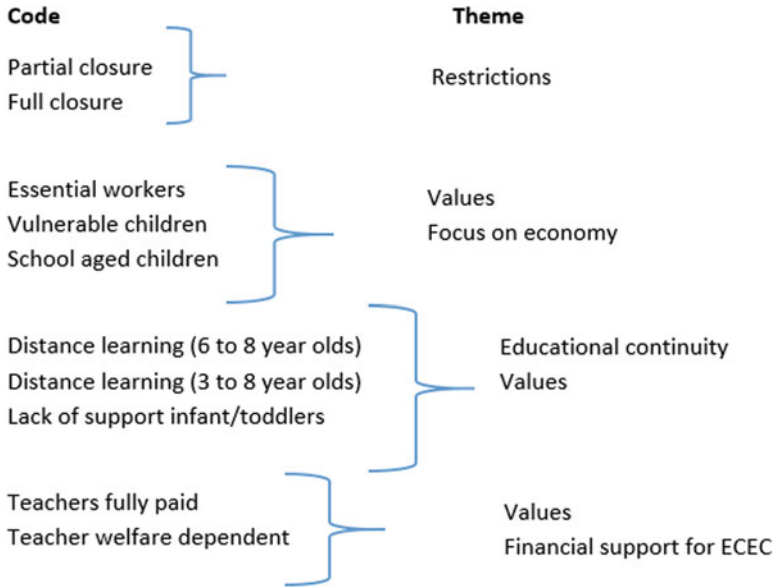


Fig. 4.2 Sample of initial coding and emerging themes

between March and June 2020. In the second group, comprising Australia, Canada, Denmark, England, Germany and Portugal, settings closed for only one or 2 weeks before reopening for children of essential workers.

During this initial process, the two authors also identified key themes (Fig. 4.2), which they shared with the entire group for review, consolidation and amendment.

During a second phase of analysis, each author reviewed the codes and emerging themes, accepting and consolidating themes, and/or suggesting new themes. For example, in addition to the theme “Educational Continuity,” a new theme, “Juxtaposing Early Childhood and Primary School,” emerged. In subsequent rounds of analysis, this theme became “Locating children and their Early Childhood Professionals.” Likewise, while researchers retained the initial theme “Educational Continuity,” they added a new theme “Quality of Educational Provision.” Throughout this iterative process, researchers supported the themes by drawing upon pertinent literature and contextual country specific information. This process continued until researchers reached consensus about thematic areas and were satisfied that the final account accurately reflected the situation in their particular country.

Ethical Issues in Qualitative Study

As qualitative research generally involves direct interaction with participants, formal ethical approval is a prerequisite. As this collaborative auto-ethnography did not

include vulnerable populations, was voluntary and met the principles of informed consent, it does not require formal ethical approval. Nevertheless, all the professional adults participating in the collaborative auto-ethnography are obligated to consider their responsibilities to one another (e.g. anonymity, confidentiality, privacy) (Ellis et al., 2011). Those who initially agreed to participate in the study understood that they could withdraw at any point without reason or consequence, on the understanding that their contributions would not be included in the chapter.

From the outset, all members of the research team respected the need to represent their country's situation in a truthful manner. To this end, as indicated earlier, authors supported their individual reflections with "country-specific" evidence (e.g. policy documents, pertinent literature, etc.). Additionally, co-authors reviewed and validated each other's accounts and interpretations, acting as it were, as critical friends for each other. Throughout the study, consent to participate was continually renegotiated as authors reviewed themes and various drafts of the study over time.

Findings

We present the analysis of government responses to the COVID-19 pandemic across the 10 countries studied. The first cluster of countries discussed, comprising Chile, Greece, Ireland and Italy experienced a prolonged period of lockdown. In the second cluster, comprising Australia, Canada, Denmark, England, Germany and Portugal, government responses focused upon preventing a full closure of settings. We discuss country specific approaches to reopening the early childhood sector, juxtaposing primary and early childhood education, and interrogate how country specific response located early childhood education and by extension children, and their early childhood professionals within the educational landscape.

Country Cluster One: Chile, Greece, Ireland and Italy

In Italy, the first and worst affected European country, the government ordered the closure of all educational institutions from March 5, until the end of August 2020. The ministry invited early childhood professionals (who maintained full salary) to organise online activities to support children's wellbeing and learning while staying at home during the lockdown. In view of the reopening of services in September, the ministry issued guidelines regarding entry and exit procedures, controlled visitor access to the buildings (including professionals), hygiene and cleaning measures, and limitations on the use of common areas (Ministero dell'Istruzione, 2020).

In Chile, where the government funds most early childhood provision (Subsecretaría de Educación Parvularia, 2020a), all schools and early childhood settings closed from March 16 until the end of the academic year in December 2020. Early childhood professionals were required to continue children's education

through remote learning by conducting instruction online with children working from home. Early childhood professionals working in publicly funded services continued to receive their full salaries. However, by June 2020, private nurseries raised concerns about financial difficulties and the lack of government support to maintain staff (Federación de Instituciones de Educación Particular (FIDE), 2020). Moreover, toward the end of the second academic semester in Chile, many raised concerns about detrimental effects on children's wellbeing and development when they no longer attended in-person classes.

In Ireland, all schools and ECEC settings closed between March 12 and June 29, 2020. The Irish government paid early childhood professionals' salaries for the duration of the lockdown and contributed 15% of staffing costs toward setting overheads (Moloney, 2020). In return, settings could not charge parents during the lockdown and were required to guarantee that children's places would be available upon reopening (Government of Ireland, 2020a).

With an increase in COVID-19 in Ireland, the health services came under increasing pressure during the lockdown. Accordingly, the Government sought to provide "childcare" in the homes of 5000 essential workers in May 2020 by asking ECEC settings to volunteer to provide childcare for health workers in their homes. Primarily, due to insurance concerns, only six settings nationally signed up to this scheme, forcing the government to cancel one week later.

In keeping with their "Roadmap for Reopening Society and Business" (2020b), the government required early childhood settings to undertake covid risk assessment, and if deemed "Covid safe" they could open for all children from June 29. The government issued guidelines and advised that children and professionals remained within their designated 'pod', that parents handed their child over to the professionals at the door, that settings increased cleaning regimes, utilised outdoor space, and professionals wear facemasks when interacting with parents during drop-off and collection (Government of Ireland, 2020b). The Government provided a €75 million funding package to help ECEC services to adhere to reopening guidelines. However, the package did not cover support for early childhood professionals, as services could not employ replacement staff if a professional was unable to return to work because of covid-related concerns (Moloney, 2020).

In Greece, ECEC is divided into the age group 0–4 (preschool centres) and the group 4–6 (kindergarten). The first group (0–4) is under the responsibility of the Hellenic Ministry of the Interior, Public Administration and Decentralisation where attendance is not compulsory. The second group (4–6) is under the responsibility of the Hellenic Ministry of Education & Religions Affairs where attendance is compulsory. The Greek government suspended all public and private ECEC services across the country from March 11 to May 30, 2020 (Government of Greece, 2020). From June 1, as the effects of the COVID-19 epidemic were very high, kindergartens and primary schools re-opened for 3 weeks with strict measures regarding the presence of students in the school in rotation, to avoid overcrowding and to maintain social distance (Hellenic Ministry of Education & Religions Affairs, 2020a). Similar to Ireland, the Greek Government paid the salaries of early childhood professionals throughout the lockdown from March 11 until June 2020.

Impact of Covid Restrictions on Pedagogical Practices During Lockdown

As mentioned, Italian early childhood services, together with other school levels, were invited to organise online activities to support children while staying at home. In view of the long lockdown, professionals in Italy have invested substantial time in online conversations and meetings with colleagues and the school board to rearrange educational goals and plans. However, the absence of guidelines on online education for young children, and a lack of investment in online infrastructure, led to fragmented interventions, mostly based on the individual ability of professionals to provide ready-made solutions to stay in touch with the children and their families. Hence, the continuity and quality of educational activity was poor, with 90% of professionals reporting lack of experience in distance learning (Di Nunzio et al., 2020).

Professionals in Italy felt disempowered and unprepared, especially about their ability to promote quality peer relationships among children and maintain contact with children from disadvantaged families (AstraRicerche, 2020; Istituto Nazionale Documentazione Innovazione Ricerca Educativa (INDIRE), 2020; Scuola.net, 2020; Società Italiana di Ricerca Didattica (SIRD), 2020). These studies report on 6–10 (primary school) and emphasise the lack of support for professionals on 3–5 years level (“scuola d’infanzia”). Overall, the lack of support for professionals in organising alternative classes and the need for an adult to be present to help the child attend the online activities hindered children’s participation in virtual education.

In Chile, each early childhood setting decided within their educational community how best to facilitate online learning. In some cases, early childhood professionals delivered online classes – by streaming or video-recorded lessons through platforms such as Zoom or Google Meet. Where internet connection was weak, they distributed printed materials to children. All of this in consideration of the Ministry of Educations guidelines, regarding curriculum prioritisation (Subsecretaría de Educación Parvularia, 2020b) and technical pedagogical orientations and pedagogical resources (Ministerio de Educación, 2020). In addition, a free educational TV channel was broadcast to all the territory (Ministerio de Educación, 2020).

Across the countries studied, where children and families were excluded from early childhood services, many early childhood professionals initiated creative solutions to remain in contact and to provide socio-emotional support, learning impulses and educational activities. In this regard, educational coordinators (professionals responsible for educational tasks of the kindergartens, serving as supervisors and mentors for professionals in early childhood settings) in Greece educated early childhood professionals in the methods and tools of distance learning. Although the Ministry of Education initiated the training, it did not issue official instruction for educational coordinators on how to support early childhood professionals. Nonetheless, based on empirical discussions with educational coordinators, it seems that many professionals participated in this training.

In Ireland, the national broadcaster, RTÉ presented ‘Home School Hub’ to support primary school aged children (aged 7+) continue learning from home. Whereas a ‘Pre-school Hub’ housed on a government website provided a range of activities to support and encourage children’s interests and keep them playing and learning at home (Government of Ireland, 2020c). It also provides guidance for parents and a range of continuing professional development resources for early childhood professionals.

In Greece, children aged 4–14 years accessed daily classes offered through the educational television program established and implemented by the Ministry of Education from April until now, in collaboration with the Institute of Educational Policy and Public Television (Hellenic Ministry of Education & Religions, 2020b). Furthermore, the Hellenic Ministry of Education and Religion Affairs created a website (Hellenic Ministry of Education & Religions, 2020c) with instructions and information on the pandemic and distance learning programs for children aged 4–12 and professionals. Greek early childhood professionals were concerned about how to communicate with children from underprivileged environments (such as Roma children, refugees, immigrants and the financially vulnerable). Many early childhood professionals either prepared printed pedagogical and creative box activities, which they shared with each student, or were at their school (while adhering to precautions) providing advice and support to children and families.

In most countries, these alternate learning avenues occurred alongside home schooling and working from home for many parents. Accordingly, children’s participation depended upon family resources, including access to the internet (not universal in many countries and not equally available to advantaged and disadvantaged families). Unlike Greece, in the absence of Government direction, early childhood professionals in Chile, and Ireland initiated ways to remain in touch with children and families at home. In these countries, low-cost social media platforms (Facebook, WhatsApp, Messenger and Viber) became the predominant mode of communication, maintaining relationships with young children and their family. Early childhood professionals in Chile also used emails and phone calls to provide socio-emotional support to children and families, to send guidelines to children and provide feedback and guidance to families about how to teach children at home (evidence collected through other projects in which the author has participated but not yet published). In Italy, while early childhood professionals (3–5 years level) communicated with children and carers primarily through emails and video calls (Centro di Ateneo di Studi e Ricerche sulla Famiglia (CARSF), 2020), these were limited to 1–2 hours per week. Likewise, planned activities were limited to 2 hours a day, on average.

Country Cluster Two: Australia, Canada, Denmark, England, Germany and Portugal

As mentioned, in the second cluster of countries, Government responses focused upon preventing a full closure of settings. As such, countries in this cluster did not

implement total lockdown. Despite this commonality, the actions differed substantially across these countries.

Australian and Canadian Governments provided extra funds to enable services to remain open for children of essential workers. However, the impact of the crisis in Australia was seen firstly in perceptions of wellbeing and in job security. A 2020 survey by the front project and replicated through a smaller survey from the Educational Leaders Association, reports that 23% of early childhood professionals indicated they were not confident of being employed in the foreseeable future, with 21% indicating their intention to leave the sector. This feeling of drift may have been mitigated to some extent by the renewal of communications and networks that acted to pass on information, and assist with interpreting information (Front Project, 2020).

In Canada, where early learning and education are determined at the provincial and territorial levels, there was a range of reactions to the COVID-19 pandemic. In March 2020, while early learning programs were shut down across the country in most provinces and territories, they remained open in British Columbia. A national survey showed that 72% of all child care programs in Canada were closed (Friendly et al., 2020). Early childhood educators were concerned for themselves, the children and families in their care, and their programs. As with Australia, there was huge uncertainty about the future, including if and when programs would reopen. Across the country, many programs re-opened for families who were deemed “essential workers”. Later in the pandemic, programs in British Columbia were given the opportunity to close or to remain open. Those who remained open, received additional funds to top up professionals’ salaries as well as for additional costs related to the pandemic (Hughes, 2020). Those who decided to close continued to receive provincial government support, for ongoing costs such as rent. However, this was not the case across the country. Fifty-four percent of early learning centres across Canada reported receiving less funding than before COVID-19 (Friendly et al., 2020). One educator described the financial loss this way, “It took us ten years to build up a reserve that will be wiped out in three months” (Friendly et al., 2020, p. 3).

In Denmark, all early childhood services closed in mid-March 2020. The government authorized the first gradual reopening of these services after 1 month, followed by a more extensive reopening in mid-May. Strengthening a well-established tradition of outdoor education already popular in Denmark and the Nordic countries, educational activity must take place in the open air as much as possible. Moreover, in common with Ireland and Italy (in group one) children were divided into smaller, fixed groups attended by specific adults in special play zones (Børns Vilkår, 2020).

In Germany, after a short break, early childhood services opened in form of a “Notbetreuung” (emergency operation mode), especially for children of essential workers. Although each of the 16 German regional states were responsible for defining when to open these reduced services for whom, while obliged to realise the general step-by-step plan decided on federal level (Jugend- und Familienministerkonferenz (JFMK), 2020). The German Ministry of Youth and Family Affairs (JFMK, 2020) recommended a gradual end to the lockdown, which

happened in four phases: essential care, expanded essential care, restricted reopening and full reopening. Nonetheless, services reopened with different conditions and at different dates, due to the federal system and dependent on the number of confirmed cases of COVID-19 in each of the 16 federal states. The emergency operation mode of early childhood settings therefore opened up gradually for different groups of children and families, including vulnerable children, and children in their last year of attending an early childhood service (*ibid.*). While public and clerical providers in Germany continued paying staff salaries, some required a form of compensation, (e.g. setting overtime hours to zero or taking vacation days), others ensured that staff would not generate under-time hours although most of them worked from home and did not have the chance to work their regular hours. However, this applied to the pedagogical staff only.

Portugal suspended teaching activities in early childhood settings, schools or social equipment to support early childhood or disability from March 16 to May 18 (for children under 3 years), and to June 1 (for children from 3 to 6 years). However, schools and early childhood settings remained open for children of essential workers (Presidency of the Council of Ministers, 2020). The Portuguese Government decreed a return to face-to-face activities for children from birth to 6 years between May 18 and June 1 and issued specific guidelines regarding the sanitary and social distancing standards to prevent contagion, similar to other countries. Like Portugal, schools and early childhood settings in England closed to all but children of essential workers and vulnerable children (Department for Education (DFE), 2020).

Similar to Ireland (first country-group), schools and ECEC settings in England, were required to carry out covid risk assessment and if deemed “Covid safe” they could open for all children from June 1. Governments in England, Australia, Denmark, Germany and Ireland (group one) offered guidance to support settings to open safely, e.g. ensuring that children remained within their designated “pod” and the implementation of a range of protective measures including increased cleaning, reducing “pinch points” and utilizing outdoor space. Similar to Ireland, regulations in Denmark and Germany establish that parents and carers must not enter the service. Instead, they hand their child to a professional at the gate (Sundhedsstyrelsen, 2021).

In relation to recompense for early childhood professionals, in England, it is necessary to note that many early childhood settings are in schools, as nurseries, and reception classes. Although children may also be using more than one kind of setting at the same time, for 3- and 4-year-old children, early childhood settings are predominantly in schools. While staff in the early years settings in schools (public sector) continued to be paid, ongoing payment for the 80% who worked in the private sector, depended on their employer (Foster, 2020). Furthermore, private sector nurseries were not always able to afford to remain open, to cater for the allowed exceptions – vulnerable children and children of key workers (Pascal et al., 2020). Additionally, this was the sector that normally, unlike the early years settings in schools, took children from the youngest ages and for the longest number of hours.

Impact of Covid Restrictions on Pedagogical Practices During Lockdown

It is evident that across the 10 countries discussed, Governments remained predominantly passive in terms of supporting young children's learning and socio-emotional development during the lockdown of early childhood settings. As such, and congruent with group one countries, responsibility for reaching out to children and families in Australia, Canada, Denmark, England, Germany and Portugal rested primarily with early childhood professionals, who endeavored to ensure continuity of learning experiences, and provide emotional support to children.

Heads of early childhood settings in schools and the private sector in England were left to make their own arrangements. While it instructed local authorities that they should support finding of places for vulnerable children and the children of key workers, the Government provided limited resources to help them do so.

In Germany, while information and recommendations provided by Ministries in all 16 Federal states focused primarily upon health and hygiene, as well as information on working in "fixed groups" and less on pedagogical issues, there are some exceptions. In Saxony for instance, various representatives of the early childhood education faculties published recommendations for reopening, emphasising developmental psychological and educational aspects (Eckhardt et al., 2020). The Ministry in Lower Saxony published a thin "concept paper" focusing on the realisation of pedagogical standards during the pandemic (Niedersächsisches Kultusministerium, 2020). Overall, however, it was primarily the providers and supporters of early childhood education in Germany who put together orientation aids in the form of practical tips and information for working in the facilities during the pandemic (e.g. Landeskompetenzentrum zur Sprachförderung an Kindertageseinrichtungen in Sachsen (LakoS) & Girlich, 2020), der Paritätische Gesamtverband, 2020).

Although limited guidelines existed to support early childhood professionals about the uncertainties of day-to-day-practice in the pandemic, the motivation for connecting with families was high across countries and early childhood services. Despite the closure of programs, therefore, educators maintained a commitment to the children and families in their care. Similar to efforts in countries where services closed completely, early childhood professionals in Australia, Canada, Denmark, England, and Germany tried to reach out to children and families in the home. Professionals in these countries also used social media messenger services and online programmes. Mostly, in the absence of Government direction, early childhood teams initiated these creative ways of supporting parents and children. In Germany, for example, early childhood professionals left boxes with activities on the children's doorsteps or organising treasure hunts, which families could do individually.

During lockdowns and limited reopening in Australia, innovative online practice was fostered in some early childhood service provider groups such as Australia's largest not-for-profit early childhood service provider, Good Start. Here, they focused staff into professional learning, parent communication and deepening programming and practice, and weekly written COVID-19 impact updates to all

professionals, a turnabout from previous corporate practices for that group. The innovative online learning early childhood parenting skills program ‘Good Start at home’, gained 200, 000+ parents during the shutdowns. Going forward, the Thrive by Five campaign for the future of early childhood is a cross-sectorial and cross-community campaign providing all stakeholders a place for their voice in early childhood (Thrive by Five, 2020).

As for supporting children’s learning during lockdown, similar to Ireland, from the first country group, Portugal established a website (Direção-geral dos estabelecimentos escolares, 2020), to guide parents, ECEC and other educational levels with a series of resources and proposals. A television channel which broadcast the programme “Ficoem casa com o Zig Zag” ([Stayhome with Zig Zag]) addressed children, aged 3–6, in particular. Additionally, the Ministry of Education published guidelines for schools to organise online teaching and learning which provided schools, teachers and early childhood professionals with suggestions and recommendations for the definition of a distance-education development strategy according to each school and community.

Impact of Covid Restrictions on Pedagogical Practices During and After Reopening

Health and safety measures have affected the daily routine of early childhood services across countries before, during and shortly after reopening. In particular, the re-structuring of groups into new and fixed groups (i.e., pods) has hindered early childhood services from implementing their preferred pedagogy. Early childhood services with open concepts, situational or Reggio approaches emphasise children’s autonomous learning by creating certain activity areas (e.g. role play, arts and crafts, natural science) and letting children move freely around the setting to choose their activities independently (e.g. Germany). COVID-19 measures, which focus predominantly upon health and safety measures, have restricted such concepts and approaches to children’s learning and development. As such, the pedagogical work with young children has been pushed to the background, leaving professionals unable to practice according to their principles. Rothe (in preparation) provides a reflection from a German head of an early childhood service, “We need these requirements in order to keep them healthy and safe, but the pedagogical work is pushed to the background completely. That’s what concerns me the most, we are unable to practice according to our concept”.

Furthermore, Information (2020) reports that in Denmark during the first month of reopening, professional-child ratios were especially low, benefitting children and professionals. Benefits included better quality adult–child interaction, better cognitive and language development, and fewer behavioural problems and conflicts between children. In turn, professionals reported that working standards were better than usual in the reopening phase (Børne- og UngdomsPædagogernes Landsforbund

(BUPL), 2020). EC professionals reported similar observations regarding the working conditions and the quality of adult–child interaction in Germany before the reopening (Rothe, [in preparation](#)). Although professionals spent more time following Government directed hygiene routines and ensuring physical distancing, they had better opportunities to develop educational work with the children than usual, which in turn, resulted in an improved working environment in terms of quality of life and wellbeing (A:børn, 2020). While this situation lasted only 1 month, it shed new light on the debate on the working conditions of professionals, as an essential requirement for guaranteeing the quality of ECEC services in Denmark.

Conclusion: Positioning of Children and Early Childhood Education During Reopening

Clearly, the pandemic represents a historical caesura for the early childhood sector and for the whole society. However, what does the pandemic reveal about the value ascribed to the sector by society? The great insecurity caused around the globe calls for a process of critical reflection of society today and tomorrow and a profound transformation process.

After the reopening at the end of the first lockdown in June 2020 in Germany, heads of ECEC settings, discussed their remembered expectations accompanying the political actions in response to the pandemic (Rothe, [in preparation](#)). All expressed their hope that the pandemic would bring a general awakening with regard to the indisputable societal significance of the ECEC sector (Ibid.). Comparing this with their actual expectations in March 2020, they felt disillusioned. One head of an early childhood setting states, “After this whole time of lockdown it became evident for me, that early childhood institutions are not recognised and appreciated as being an educational institution. It doesn’t matter what children miss during this time of lockdown; it only matters if children are looked after so that their parents can go to work” (Ibid.). Likewise, in Ireland, Moloney (2020, n. p.) notes, “In the absence of early childhood settings, the remainder of the economy becomes paralysed. Parents cannot return to work, education, or training, without ECEC provision”. Against this backdrop, and drawing upon the findings reported, we now discuss how early childhood education should (re)develop to prepare children for the times we live in, so they are able to cope and shape future societies with confidence and purpose. Finally, we ask whether the current pandemic could possibly see the dawn of a new era in knowledge and understanding of the centrality of ECEC.

Clearly, the pandemic is challenging, and symptomatic of the times we live in, an “age of uncertainty” (Kenway & Bullen, 2000; Dimmon & Walker, 2000) characterized by intense turbulence, disillusionment and bewilderment. On a deeper level, the pandemic itself refers to a “crisis of legitimization” (Liesner & Wimmer, 2003; Rothe, 2019) that reveals a non-simultaneity and imbalance of conventional knowledge and approaches as well as new phenomena and challenges. So, while Muggah

and Goldin (2020) state, “Governments, businesses and societies are in good shape to weather global crises” (p. 10), we question whether our education system equips children to face the challenges of the future.

It seems to us, that this unprecedented crisis illuminates Fullan’s (2020) assertion that prior to the pandemic, the worldwide education system was stagnant. As such, the pandemic has aggravated political and societal grievances and laid bare social and educational inequities. Our comparison across 10 countries prompts us to describe in more detail what this stagnation means for the ECEC sector. At least four significant similarities, which are valid in each of the 10 countries, emerge:

1. The COVID-19 pandemic has reduced the societal and political value of the ECEC sector. Government actions have positioned ECEC primarily as a caregiving institution for children, comprised of essential workers, and a mechanism to reopen the economy.
2. Pandemic measures positioned ‘education’ within the four walls of formal education in primary schools. Given the priority afforded to formal education therefore, educational continuity for primary school children was paramount in each country studied. Thus, signalling the lack of value and priority placed on quality learning opportunities for children outside the school system.
3. The lack of government attention to young children’s social and emotional well-being during the pandemic belies a cavalier attitude to the centrality of ECEC to children’s holistic development.
4. Failure to recognise the critical importance of ECEC during the current international crisis positions early childhood professionals as the arbiter in reaching out to children and families to provide socio-emotional and educational support at the early childhood centre or at home.

As noted by the Front Project (2020), COVID-19 has shone a light on the critical importance of ECEC. Overall, however, Government responses across the 10 countries studied indicate that weathering the pandemic and its aftermath relies upon the initiative, engagement, ideals and ideas of early childhood teams. Early childhood educators need to uphold their professional principles to shore up children’s social-emotional development and ensure quality learning experiences in a time of crisis. Clearly, Anne Stonehouse’s (1989) assertion that the general public views early childhood educators as “nice ladies” (p. 6) who are expected to volunteer their time without thought of remuneration, has not yet faded from societal consciousness. Yet, across the countries studied, the professionalism of the early childhood professionals (predominantly female) themselves has maintained the quality and continuity of service provision during the current crisis. It is ironic that high quality remains dependant on the professionalism of the workforce, whilst simultaneously, positioning such commitment to their role as the natural caring instincts of “nice ladies” (Stonehouse, 1989). However, despite these sobering insights, we support scholars who purport that this educational crisis will bring change (e.g. Arnove, 2020; Robinson, 2020; Zhao, 2020). Globally, society is at a turning point. According to Vandebroek (2017), one of the major relevant questions of the present asks: How do we want to live and what should societies look like today and tomorrow?

This crisis reflects the ambiguous times we live in and the future that awaits us (e.g. Myung & Kimner, 2020; Couture et al., 2020). Some scholars have discussed the influence of four variables –volatility, uncertainty, complexity and ambiguity (VUCA) – on efforts to restructure education. Institutions of education “are forever teetering between a sense of equilibrium and disequilibrium” (Van Nuland et al., 2020, p. 449).

While these are important aspects to consider, the current pandemic also reveals the dawn of a new era in knowledge and understanding of the centrality of ECEC. From this perspective, it is important to raise awareness of the need to enable our children to cope and shape future societies with confidence and purpose. Previously, Singh (1991) stated “there is [. . .] a widely prevalent sense that the pace of change, even turbulence, is accelerating as never before” and noticed “traditionally education has been more pre-occupied with the pressures of the present rather than the anticipations of the future” (p. vii).

Accordingly, scholars including Hadar et al. (2020), Fuentes-Camacho et al. (2019) and Vandembroeck (2017) provide relevant contributions to this debate by defining new areas of knowledge of a curriculum of the future, relevant for coping with future societies and uncertain and ambiguous times. As noted by Fuentes-Camacho et al. (2019), “Individuals as part of society must . . . have the power to act in complex situations in a sustainable manner,” this includes “engaging learners through applicable skills and knowledge and real-world connections to make learning relevant, personal and engaging” (p. 766). Most importantly, it is crucial for educational policy and society to acknowledge the early childhood profession as an essential motor of this transformation (Moloney et al., 2019). Early childhood professionals can lead the change, providing children with essential knowledge and skills to become strong, independent adults, confident to handle uncertainty and ambiguity. Not only in the future, even at present, early childhood professionals are an essential resource for children and their families, being a role model for children in terms of how to handle the current challenges and being a support for families at the edge of excessive demands and chaos.

This collaborative auto-ethnographic study illuminates key themes associated with the COVID-19 pandemic across 10 countries. It enabled the authors to develop hypotheses about the nature of this pandemic and its consequences for EC professionals, children, their families, and the economy. Overall, this study indicates the importance of examining the current crisis as well as future disasters from an international perspective.

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Chapter 5

COVID-19 and Early Childhood Care and Education in India



Sunita Singh

Introduction

The coronavirus disease (COVID-19) pandemic ravaged across nations and affected all walks of life in different ways. The impact has been especially severe for countries with underfunded, overburdened and fragile support systems for young children and families. The pandemic has left almost half of the children across the world with low levels of literacy along with poor health conditions (UNESCO, 2021). With job losses and consequent social and economic changes, it sharply divided the academic, social and political world in India—especially more so for the already marginalized in the country. The pandemic acutely affected lives of young children and families with closure of preschools and schools. It has been more than a year since the pandemic hit the world in March 2020 and the turmoil has continued across all walks of life and generations. As far as the education of young children in India is concerned, aside from the obvious (i.e., the closure of schools and preschools) information regarding the changes brought about in the education system and access to education during the pandemic is scarce and scattered. This chapter will present an analysis of the impact of COVID-19 pandemic on the landscape of early childhood care and education (ECCE) in India while also serving as a tool for reflection for those from other countries. It will provide an overview of the effects on the academic aspects, social, emotional and physical development, family–school relationships, and the reach of technology across homes of young children. It will weave in the policy context vis-à-vis the functioning of the institutions that provide ECCE services for children and families and how the pandemic has deepened the already existing gap in access to support.

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COVID 19 and its Impact on the Education Sector in India

India faced one of the most intensive lockdowns in March 2020, which resulted in an exodus of the working class populations back to their hometowns for fear of job loss and hunger. In fact, this migration was the second largest in the history of the country after the partition in 1947, which led to the displacement of more than 14 million Indians to India and Pakistan, respectively, depending upon their religious backgrounds (Mukhra et al., 2020). Consequently, various other calamities such as cyclones and floods across the country have pushed the marginalized further back into the margins (Jaffery, 2020). The end of 2020 and beginning of 2021 saw some normalcy in life in terms of opening of businesses, offices and educational institutions, especially for older children. However, yet again, a second wave of the pandemic gripped the country with devastating effects in April–May 2021 (Kar et al., 2021). This second wave brought back a similar standstill to the lives and livelihood of many in the country as the first wave, revealing the inequities in the health system at the same time.

Most educational institutions for young children, especially from preschool to grade eighth, which were closed in March 2020 as a result of the first lockdown, remained closed for more than a year with no opening date in sight. According to The Lancet COVID-19 Commission India Taskforce (2021),

In India alone, an estimated 1.4 million *Anganwadis* (government-run child nutrition and early childhood education centres), 55,000 private pre-primaries, 1.5 million K-12 schools, 41,901 colleges and 1028 universities have been sporadically shut for over 11 months, disrupting learning, and incurring economic losses estimated at over USD 400 billion in the country's future earnings. (p. 3)

A report by UNESCO, estimates that 0.32 billion students were directly affected by the closure of schools in India (UNESCO, 2020). While this closure affected students across age groups, it disproportionately affected students in the rural areas (approximately 84%) and those attending government schools (approximately 70%) (UNESCO, 2020). These numbers are evidence of unimaginable loss of learning for young students. While many schools were providing online classes for the elementary students, there was little or no support for the education of most preschool students. In fact, school reopening itself became a matter of national debate as the country began the process of unlocking after the first wave of the pandemic (Sharma & Joshi, 2021). Even though the government allowed openings of schools with physical distancing, sanitisation and other precautions (Government of India, 2020d), apprehension among families continued, especially owing to the rise in COVID cases (Times of India, 2020). The beginning of 2021 saw the launch of the vaccination drive across the country; however, hesitations continued in sending young children to school with a recommendation for vaccination of all school-teachers and staff members on a priority basis (The Lancet COVID-19 Commission, 2021). The country has been divided about sending children to in-person group classes at school. A large section has worries over the safety of sending children to school who are unvaccinated even as a growing number of adults are vaccinated, and

a large number acknowledge the need to open schools to counter the insurmountable loss of learning and development. Researchers have sounded alarm by stating that many children who were able to read and write before the pandemic have lost the ability to do so (Arya, 2021). Further, once children are out of schools, they may drop out of the system and may never come back (Dhanalakshmi et al., 2021). In this, the fate of preschool children remains undecided because schools for the youngest would be the last to open.

The primary institutions for providing educational services are preschools, schools and other educational centres—and the primary employees are *Anganwadi* (government preschools) workers, teachers, principals and other school staff. However, the running of educational institutions also involves several ancillary staff who might be engaged in administration, transportation, food- and medical-related provisions, and other facilitative work. Several of these staff members are often engaged on a contractual basis with no employment security. According to a report by Azim Premji University, education was one of the sectors that witnessed a transition of approximately 18% of workers into agriculture or other trades (Azim Premji University Report, 2021). The report has predicted that the loss in educational opportunities and poor nutrition due to financial challenges could lead to enduring negative consequences. This also implies that the pandemic will have a deep-rooted effect on the educational eco-sector as well.

One of the challenges in understanding the effects of the pandemic on the education sector has been the novelty and unprecedented nature of the phenomenon and restriction on mobility for the researchers themselves. Therefore, changes in the educational landscape can only be gauged from limited research studies and media sources. Furthermore, the restrictions on mobility have resulted in research studies that have used mostly online data collection methods. This also implies that the voices of students, teachers and parents who do not have access to online modalities would be left unheard. The pandemic has resulted in *Anganwadi* workers (Bauza et al., 2021) and schoolteachers being called away for COVID duty (Manjesh, 2021)—leaving poor and vulnerable children with little support for care and education. This brief overview provides a bleak picture of education in general and early childhood education in the wake of the pandemic in India. Given the large-scale loss of livelihoods with the lockdown, education as a priority has taken a backseat. For children in the early childhood years especially, there has been even lesser focus.

Understanding the Provisions of Early Childhood Care and Education in India

The schooling context provides a backdrop against which one can understand the education for children in preschool years. To gauge the impact of the COVID-19 pandemic on early childhood education in India, it is important to analyse the landscape of ECEC in the Indian context. The largest provider of preschool

education for the most vulnerable populations of young children across the country are the *Anganwadi* centers (AWC) of the Integrated Child Development Scheme (ICDS). The ICDS, launched in 1975 is the world's largest community-based child development program, which aims at the holistic development of children below 6 years of age, expectant and nursing mothers, and adolescent girls (Manzoor & Khurshid, 2014). The six services within the ambit of ICDS comprise immunisation, supplementary nutrition, health checkups, referral services, preschool education and nutrition and health education. The services are provided to the most vulnerable populations and at underserved areas, such as rural areas, tribal sects and urban slums (Manzoor & Khurshid, 2014). The challenges in providing quality early childhood care and education in the country are well documented, especially owing to the diversity of the country (Kaul & Bhattacharjea, 2019; Pattnaik, 1996). The central government is responsible for planning and operating costs, whereas the state governments are responsible for implementing the program and providing supplementary nutrition out of their own resources (Manzoor & Khurshid, 2014). The ICDS provides services to nearly 80 million children under 6 years of age, through a network of 1.4 million approved *Anganwadi* centers (Government of India, 2013a). The ICDS program was restructured by the Ministry of Women and Child Development Department. The restructuring of the ICDS aimed to achieve three outcomes, which could be monitored by the end of the Twelfth Five-Year Plan (Planning Commission, 2012). The first was to prevent and reduce under-nutrition among young children, especially under the age of 3, the second was to focus on early learning and development outcomes in children from birth to 6 years, and the third was to improve nutrition and health among adolescent girls and women (ICDS, n.d.).

The significance of the early years of a child's life has found a place in most national documents such as the National Policy on Education (Government of India, 1986), the National Nutrition Policy (Government of India, 1993), the National Plan of Action for Children (Government of India, 2016) and the National Curriculum Framework (NCERT, 2005). The National ECCE Policy (Government of India, 2013a, b) emphasizes the holistic development of children and identifies the core areas for intervention related to healthcare, nutrition and play-based preschool education. While preschool education is not mandatory in the country, the Right to Free and Compulsory Education Act (RTE) (Government of India, 2009) recognizes that ECEC is essential for children in the age group of 3 to 6 years. Article 45 of the Constitution of India requires the state to provide ECCE services for children of age group of birth to 6 years. The recently launched National Education Policy (NEP) (Government of India, 2020b) brings ECEC during the foundational years to the forefront of the document, while recognising its criticality. It is important to note here that since the NEP was launched in the middle of a pandemic, the policy does acknowledge the role of research and the significance of online and digital education. However, the diverse needs of young children and finding ways to mitigate challenges in a pandemic do not find a place in the policy.

There is a recurring focus on ECEC in the policies of the government and reflexivity in making changes where necessary. However, in this scenario, one

must keep in mind that the *Anganwadis* are not the only provisions for preschools. Preschool education in the country is also provided by private preschools and in some cases non-governmental organizations (Kaul, 2019). Additionally, the unevenness of this landscape is well documented (Kaul, 2019; Prochner, 2002). In the race for the downward push of the curriculum even for preschool children, there is little understanding of the ‘play-based’ approaches for young children (Prochner, 2002). Even with the provisioning for free preschool education by the ICDS, many children do not attend preschools (Ghosh, 2019). This ‘push down’ of the curriculum also comes from parents aspiring to admit their wards in private preschools that have a good result in high school and senior secondary school. Many of the schools being composite schools motivate parents to admit their children in the pre-primary grades. However, it is important to note that research (Goyal & Pandey, 2012; Karopady, 2014) has also provided evidence that the fee-charging private schools in rural areas may not necessarily provide better educational opportunities in comparison with government schools, especially for children from disadvantaged backgrounds. The diversity of the private provisions reflects some of the diversities of a socially stratified society; however, children from disadvantaged backgrounds mostly access only government provisions (De, et al., 2002). This is also a concern for an increase in this social stratification along the lines of social class (Karopady, 2014). The uneven opportunities for preschool education, especially in rural India, are owing to several factors, including the socioeconomic conditions of the parents (Ghosh, 2019).

In the wake of the pandemic, there have been multiple challenges for early childhood care and education of young children. The lockdown resulted in a closure of the *Anganwadi* centres as well and non-availability of services related to its critical functions of providing nutrition and immunisation. This led to hunger and undernutrition among children and pregnant women who needed these services the most (Basu & Sharma, 2021). A study was conducted with 131 participants in households across rural Odisha to explore the understandings of the knowledge, beliefs and preventive measures regarding COVID-19 pandemic (Bauza et al., 2021). The study, conducted using semi-structured phone interviews in May–June 2020, indicated that most participants were aware of the symptoms and preventive measures related to COVID-19 pandemic. In addition to the preventive measures, the participants documented the multiple challenges faced in getting accustomed to the new social-emotional norms, financial crisis, availability of food, thus highlighting the disproportionate influence on the marginalized populations. The study also provided evidence to the role of the *Anganwadi* workers (AWWs) as one of the important sources of information regarding the same. While the study is not specifically about early childhood education in India, it highlights the crises brought about by the pandemic and the changed role of the AWWs. In order to mitigate the effects of the closure of the *Anganwadi* centers and the pandemic, the ICDS provided the AWWs with smartphones and provisioned door-to-door services (Alam & Afroz, 2020). Even after the lockdown eased after a few months, resuming services became a challenge, especially due to the closing of the *Anganwadi* centers (UNICEF, 2020). Although there was some continuity in the supply of health and nutrition services,

the early childhood education component which was already weak came to a halt for the underprivileged children who needed the services the most. A study by Sengupta and Pal (2021) in the Arambagh Block of Hooghly district of West Bengal documenting the socioeconomic and demographic profile of 100 *Anganwadi* workers indicated that while they provided critical services for the most vulnerable children and their families as the ‘supply chain’ was affected due to the lockdown across the country, their own conditions were fragile. The AWWs, widely applauded as frontline workers, reported that they were engaged in the delivery of mid-day meals, home delivery of nutritious food, serving food to migrant workers and in the delivery of rations at homes. Even as they were engaged in this critical work during the pandemic which addressed micro as well as macro needs of children and their families, they were facing delays in receiving remuneration and their own health and safety issues were not adequately addressed. Thus, education for young children has taken a back seat. The state of support for children in the government sector has drastically receded. The state of children attending low-budget private preschools remains largely undocumented since there is little or no regulation of the sector.

Role of Technology in Education

One of the dominant discourses centred on education during the pandemic has been related to the use of digital learning platforms for students as face-to-face classes came to a halt. Needless to say, this transition has only widened the disparities. Given the massive challenges brought about by the pandemic, there has been little focus on the education of young children, especially in the preschool years. The 260 billion USD fiscal stimulus package by the Government of India, launched in five segments in May 2020 focused mainly on supporting online and digital learning platforms, including use of community radio for education of children (Government of India, 2020a). This was in response to the lack of access to online modes of learning for many children. Most of the programs were geared towards school-going children, not necessarily preschool.

Early childhood years are perhaps the most challenging to transition into an online mode, especially owing to the dominant modalities of interactive classroom transactions (Santos & Lacerda, 2020). The critique for glorifying the use of technology comes in the face of the facts that first, the role of the teacher in the educational processes is undeniable and second, a large number of schools and households in India do not have adequate technology to transition to an online medium (Pathak, 2020). Debate has ensued in the country regarding the time of exposure of online classes for young children. The government also announced a time limit on the online classes for young children with a limit of 30 min for pre-primary children (The Economic Times, 2020).

Any mention of technology for children from birth to 6 years is conspicuously absent in the National Policy on Early Childhood Care and Education (Government of India, 2013a). The National ECCE policy and the accompanying ECCE

Curriculum Framework (Government of India, 2013a, b) have guided the curricular reforms across states in the country since 2013 and need to be developed in a responsive manner. This implies guidelines for developmentally and contextually appropriate practices that would be applicable across all settings and not only in homes with technology. While no specific reasons have been cited for non-inclusion of technology guidelines, there is a possibility that independent guidelines for the appropriate use of technology for children under the age of 6 years have not been developed in the country yet or there is an ambiguity regarding the benefits of technology for children under the age of 6. Hence, as one may imagine there would be little focus on use of technology for preschool teachers, especially *AWWs*. This aspect became especially pronounced during the pandemic when we saw that the *Anganwadi* workers were assigned COVID duties (Neetha, 2021; Sengupta & Pal, 2021) and were not engaged in any preschool education-related activities with young children.

The pandemic highlighted the inequities in the socioeconomic world as it was splashed across headlines of all news dailies. In the schooling system, the shift to the online mode of instruction only deepened these existing divides. A study was conducted by Jain et al. (2021) to document the effects of the pandemic on educational provisions. The study was conducted from April to May 2020 using an online survey with 550 teachers from Delhi and National Capital Region (NCR), across grade levels. Out of the 288 responses of the teachers from government and private schools, the sharp inequalities brought about by the shift to the online mode were evident. The challenges faced by the teachers include gaps in the access of technology and availability of online resources. The second challenge was regarding the digital literacy and pedagogy gap which highlighted the skills teachers need to prepare and transact lessons in an online mode. The third major challenge was regarding the usage gap, which led to low use of online pedagogy by teachers—especially in government schools. This was compounded by the classroom demographics where most government school teachers also had most students from economically weaker sections of the society. The study additionally highlighted the role of the ed-tech companies which have portrayed themselves as the much-needed intervention during these times. However, these companies only widen the existing gaps and do not really reach the students who are already left behind. The class difference in the use of technology is apparent. On the one hand, the *Anganwadi* workers have been called away for pandemic duties (Neetha, 2021), while children attending private preschools or children where families have the resources are able to access and maintain continuity in their education. As access to technology has become synonymous to education, technology has not emerged as a panacea for the young and the marginalized with little or no access to it.

Social, Emotional, Physical Development and the Role of Play

The disparities of preschool education are evident as we examine the provisions necessary for education during the pandemic and how the government and private institutions have prepared their own teachers for the same. With children and families staying at home, it is possible that many families have been able to provide for the academic content (Seshasai, 2021). Staying inside homes for more than a year would have a long-lasting impact on the social, emotional and physical development of young children who need to interact in their homes, communities and schools for holistic development. The link between obesity and socioeconomic status has been documented with reference to unhealthy food habits, sedentary lifestyle, use of playtime for tuitions and other academic pursuits to prepare for the competitive environment coupled with the shrinking areas of play (Bhave et al., 2004). Childhood obesity and type 2 diabetes among young children have been increasing over the years, especially among the children in the upper economic strata, primarily due to the change in lifestyles due to urbanisation and nutritional patterns (Praveen & Tandon, 2016). With a rapid decline in physical activity since the closure of schools, the pandemic would only exacerbate it. As young children stay confined in their homes, their activity levels are lower and the long-term effects of this are yet to be seen.

Health and nutrition are interconnected and critical aspects for young children. The socioeconomic divide in access to nutrition has been stark during the pandemic. The ICDS system for children under the age of 6 and the mid-day meal (Government of India, n.d.) for children in the elementary school years provide meals free of cost (Government of India, n.d.). For many children, these meals are one of the most important meals of the day. During the pandemic, with the closure of the *Anganwadi*, these meals stopped. These services were initiated once again in a different modality, with the distribution of food and nutrition to the families once in 15 days (Government of India, 2020c). According to the World Bank (2020),

Experience from past pandemics and times of economic disruption has shown that ensuring food security and nutrition becomes even more critical. When food prices rise and supply chains break down, the earnings of the poor and vulnerable fall substantially. At such times, it is always the women and young children who are the hardest hit. Significant government intervention is then needed to ward off undernutrition and destitution, which can weaken the immune system and increase susceptibility to the disease.

The *Anganwadi* workers therefore continue to distribute rations of rice and dal (pulses) [lentils] – and in some states eggs – to pregnant and nursing mothers and young children, to ensure that they receive their regular supply of nutrients during these critical periods of their life. The only difference now is that instead of distributing these at the *Anganwadi* centers, they take them directly to the homes of vulnerable families (para 14).

However, given the macro effects of the pandemic which has resulted in loss of livelihoods and displacement, especially among the poor and the marginalized, many challenges may remain for a while.

The socio-emotional aspects are critical for the overall development of young children. The changed scenario and the overall stress levels for children and families have tended to increase. For young children, the diversity in play allows them to engage with their peers and interact with them. This interaction facilitates the development of social and emotional skills among young children. The pandemic has brought about even more reduction of play spaces which were already shrinking due to the rapid urbanisation and increasing use of technology. Children's engagement with play provides a physical release and 'may facilitate friendships and promote cooperative pro-social behaviours and attitudes' (Scott & Panksepp, 2003, p. 549). The complexity of play is well documented (Wood & Chesworth, 2021). Playing with peers also brings with it building of relationships, conflicts and learning to work through it (Blasi & Hurwitz, 2002). While these diverse benefits of play are well researched in the academic literature, in many preschools, play-based transactions are not necessarily considered to lead towards preparation for primary schools, hence not always popular (Singh & Chaudhary, 2019). For young children, all domains of development are interconnected, and the social, emotional and physical well-being prepare the child for further learning and development. It is well documented that many children would fail to reach their potential because of inadequate care and early stimulation, poverty, malnutrition, poor health and poor-quality early childhood education (ECE) (Kaul & Sankara, 2009). This is often due to the diverse contexts—leading to inequities in services that children can access, variations in developmental patterns and the inability of the school systems to provide educational experiences that are inclusive and supportive of the needs of the diverse learners (NAEYC, 2019). The pandemic has created this environment for many more children in the country by denying access to provisions that were earlier available and children had a right to these provisions. There is a possibility to quantify the loss of academic aspects that young children are facing because of school closures. However, the long-term effects of the social, emotional and physical losses may not even be quantifiable. With young children, it may take several years to understand the effects of the pandemic.

Family–School Relationships

Family provides the child with affection, self-esteem, spiritual support, economic support, care, socialisation, recreation and education (Turnbull, et al., 1984). The relationships between the school and the family are complex. In India, the diversity of the family structure adds to this complexity. Tuli (2012), on discussing the issues of family and childcare in India aptly describes the social fabric of the country as one that is comprised of heterogeneity, with family as the key social institution and one that exerts a strong influence on each of its members. Specifically, she states, 'the family is the hub of all activity from the day a child is born. With a large majority of families having a joint structure, the identities of members also take on collective hues' (Tuli, 2012, p. 82). According to Chaudhary (2013), there is an intertwined

relationship between children's care, their expressions and adult beliefs, and this is contextualized within the social, cultural and psychological worlds. She points out that the adult could be any/many members of the family/community, not necessarily the mother. Tuli (2012) also points out that raising children often requires continuous engagement and interaction between the child, the family and the various social structures at large. This inclusive arrangement of child care is especially relevant in the context of joint families in rural and semi-urban setups. Parenting and childhood experiences in nuclear families are more unique and difficult to generalize. Increased global and modern influences have initiated many changes in gender and class equations as well as in family dynamics. Women have increasingly started participating in economic roles and therefore the responsibility of childcare—which traditionally was considered the domain of the mother—is now being shared by both parents. This has led to modifications in the traditional ideas of fatherhood and motherhood. In situations where both parents are unable to devote enough time to their children, grandparents and tertiary child caregivers and institutions also participate in the rearing of the child and become part of the web of relationships that impacts a child's growth and development. The nature of family in India is very dynamic and characterized by plurality and interconnectedness.

The COVID-19 pandemic changed the dynamics of early childhood education. Suddenly, children found themselves locked in their homes with varying opportunities for education across households. Even in households where children were able to access online education, parents had to assume the role of the mediator because they were the ones facilitating the online transactions for their young children. This led to some unique challenges for parents for several reasons. First, for many of the working parents, it was difficult to find time to attend to their own work and their children's classes. The online classes for children who were able to access it had a completely changed scenario. Parents became willing or unwilling participants in the online classes, especially for younger children. This created discomfort for some teachers as they were observed by parents and or the school principal while they were taking classes without a specific role for them (Jain et al., 2021).

Positive family interactions with programs results in parents bringing in learning from the early childhood environment back to the home (Weiss et al., 2006) and from home into the preschool setting (Singh et al., 2015). Ghosh (2019) investigated the parental perspectives on preschool choice and the influence of the socioeconomic contexts on the same. Results from a survey administered across 1373 households in West Bengal indicated that reasons for the non-participation of children in preschool services was the educational levels of the parents themselves, the quality of preschools and the costs of sending children to preschool. The study (Ghosh, 2019) indicated that many parents were not aware of the significance of quality preschool education for their children. Lastly, the vulnerable nature of the families also makes it challenging for them to engage with the school system and provide support to their young children as children remain in closed spaces for several months altogether. Low-income parents already face a host of challenges in supporting their children's education. This was heightened during the pandemic. The challenges are from diverse fronts which make it difficult for them to engage with the teachers and the

school system. These include their own illiteracy levels, lack of knowledge about the education system, lack of technological access and skill, and the overall stress of living and providing for the family.

In the context of the pandemic where families are at the centre of their child's education, a healthy relationship between the school and the family is essential. It is important that education is perceived to be essential by the families for children in the wake of challenges such as the pandemic (Dhanalakshmi et al., 2021) and parents themselves are prepared to facilitate classroom transactions through technology (UNESCO, 2021). Ways of supporting parents and working with the school systems become imperative in the face of disrupted communication between home and school. The uneven relationships between schools and families need to be understood in a more nuanced manner, keeping in mind the inequities and teachers need to be provided with resources and engaged in capacity building to work with all families.

Conclusion and Implications

Given the criticality of the early childhood years as well as the kind and amount of support children need during this time, the pandemic will have an impact on vulnerable young children and their families for decades to come. This chapter provided an overview of ways by which early childhood care and education have been impacted in India during the pandemic. For young children, provisions of early childhood care and education are multidimensional. These include policy and curriculum framework, an early childhood program which provides holistic care and education and a supportive environment at home, in the school and in the community. The role of the early childhood teacher who can create an inclusive environment in the classroom is unparalleled (Singh, 2011). However, as documented in the chapter, the pandemic has created a vacuum in many of these spaces which are critical for young children. While children across the world have experienced some form of withdrawal of services, for the marginalized and most vulnerable in India, the impact of the pandemic has exacerbated the divide. As pointed out by Jain et al. (2021).

Lockdowns and quarantines mean that economically marginalized groups, many of whom are from minority communities and are already disproportionately affected, will suffer both concerning their lack of access to education and the broader inequity brought about by that same education system. (p. 60)

The sharp divide created by the pandemic makes it necessary to pay attention to issues of equity and access when creating provisions. The altered landscape of ECEC in the country points to the fact that children from marginalized backgrounds would be the last ones to get access to schools. The documentation of the state of early childhood education in the country has major implications for the future of education of young children, the provisioning context in India and ways to

strengthen them. Hence, it becomes necessary to draw upon the implications keeping in mind the last child who needs to be in school.

Universal preschool for children will ensure that all children are able to access the care and education they need, especially during the challenging times. Technology cannot be seen as the panacea for very young children. The first necessity is to improve the capacity of the preschool teachers and AWWs in their knowledge and understanding of early childhood care and education, and the significance of the same for young children. This will come only when systemic changes are targeted by reaching out to the preschool directors/school principals and the supervisors of the *Anganwadi* centres for a similar capacity building. Advocacy at higher levels of the government is also necessary for ensuring that in times of crises, preschool children have teachers available for education and development. The education of children during these early years enables them to develop a stronger base for the future. Further to this, remuneration of the *Anganwadi* worker needs to be in consonance with the responsibilities given to them. Major stakeholders of the system are the parents themselves in ensuring that their children reach preschool and education reaches their children. It is also important to work with parents to ensure that they understand the significance of education for their young children and are able to work with their children.

One of the major implications of this chapter is that across the globe, more emphasis needs to be laid on how low-income families and communities could support their children's learning and development at home, especially during a pandemic or other challenging times. These could be in the form of literacy programs or interventions that focus on their own learning which would enable them to support the literacy and schooling of their young children along with access and knowledge of technology. The preparation of teachers of young children also needs more attention for ways of use of technology, work with children and families remotely, systems of addressing the mental health of children, and support for their own well-being (Atiles et al., 2021). Further, the transitions during the pandemic have pointed to the necessity for families, communities, children and schools to work together and understand the criticality of young children's education. This cannot be accomplished on its own, but by consistent support and advocacy for the same at all levels of governance and by all stakeholders.

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Chapter 6

Preschoolers' Perceptions of the COVID-19 Epidemic: An Interview Study with Children in Slovenia



Marcela Batistič Zorec and Mojca Peček

The COVID-19 epidemic has had a major impact on everyday life. Since March 2020, several studies have been undertaken to research its influence on different aspects of life. Journals have been willing to share these results and thus contribute to the ending of the epidemic, inviting anyone interested to take them further. However, preschool children seldom are research participants (Elmore et al., 2020; Kahuroa et al., 2021; O'Keeffe & McNally, 2021), and even less attention has been paid to their perspectives regarding the COVID-19 situation. Our research project set out to rectify this. We were interested in determining how preschool children, aged 3–6, experienced the lockdown period and their understanding of it. We started from the position that children are competent (Dahlberg & Moss, 2005; Kroflič, 2011; Gandini, 1993; Rinaldi 2006) and able to tell us much about their lives if we are willing to listen.

Background

The preview of the literature review is organized in two sections. The first section focuses on an analysis of previous research studies investigating children's perspectives. This section is followed by an analysis of research investigating the impact of the COVID-19 epidemic on preschoolers' lives and development.

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The Competent Child and Research on Children's Perspectives

The idea of the child as a competent being as opposed to someone helpless and in need of help (Kroflič, 2011) started to gain prominence in the 1980s; the first to promote it were Reggio Emilia pedagogues. Mallaguzzi (as quoted in Gandini, 1993) claims that, instead of highlighting children's weaknesses and limitations, we should focus primarily on their incredible skills and abilities to express themselves and be active. The concept of the competent child spread mainly in the early childhood field with a growing recognition of the importance of listening to young children's perspectives (Pascal & Bertram, 2009). The Scandinavian countries have developed an influential discourse on children's rights that highlights participation and listening to children (Kjørholt, 2005), and other national curricula have also started to follow suit (Ministry of Education, 2021). Waller and Bitou (2011) argue that a key challenge in promoting children's participation is to ensure that children have the opportunity and space to articulate their views and perspectives beyond the constraints of adults' views, interpretations, and agendas. Moss et al. (2005) strongly emphasize that participation and listening to children in preschool should not be a matter of teaching tools and techniques but should instead reflect a certain way of life and relationships in preschool. Rinaldi (2006) stresses that listening is a way to reflect and think about oneself in relationship to others as well as the world in general. Listening is thus always related to personal relationships, and in the same author's view, it includes reciprocity and emotion, sensibility and openness, along with doubt and uncertainty.

Listening to children and comprehending their perspectives has influenced research in such a way that authors increasingly speak about research with children rather than of children (Cuevas-Parra, 2020; Pascal & Bertram, 2009, 2021). Dunphy (2005) points out that the bases for this change in researchers' views are children's rights and belief in their competence. Flewitt (2005) suggests respectful and inclusive involvement of children in the research process. Research with children assumes that children are experts and agents in their own lives (Clark, 2005; Eckhoff, 2019).

Research with children, however, creates many dilemmas related to the balance of power and research ethics. It is important that we remain aware of the power differential between adults and children and its consequences. Some children are not used to adults being interested in their views and opinions. Children perceive adults as authority figures and mostly wish to please them; therefore, they fear adults' reactions if they say something "wrong" (Einarsdottir, 2007). For researchers, it is a challenge to find the right approach that leads children to trust them and believe that they are truly interested in their views, activities, and interests. Clark (2005) points out that it is very important to use different methods for different children and promotes an approach based on the recognition of different "voices" or children's languages. Other researchers also emphasize that no method is universally applicable and that every research project with children requires methods and techniques that are appropriate to the given circumstances (i.e., their competences,

knowledge, and interests) (Einarsdottir, 2007). Waller and Bitou (2011) claim that the research design and relationships are what creates real participation and engagement. They too warn that research with children involves ethical dilemmas in interpreting children's perspectives primarily from the adult point of view.

The COVID-19 Epidemic and Research on Its Impact on the Lives and Development of Preschool Children

Research shows that the epidemic has had a considerable impact on preschool education in many countries, leaving many children without preschool for a long period (Malta Campos & Fraga Vieira, 2021; Pramling Samuelsson et al., 2020; Yildirim, 2021) and creating many challenges for their parents (Hacin Beyazoglu et al., 2020; Timmons et al., 2021) and teachers who attempt to conduct classes online (Crawford et al. 2021; Malta Campos & Fraga Vieira, 2021; McKenna et al. 2021; O'Keeffe & McNally, 2021; Timmons et al., 2021). The epidemic has had consequences for children's lives and their development (Atabey, 2021; Cantiani et al., 2021; Egan et al., 2021; Glynn et al., 2021; Mantovani et al., 2021; Mochida et al., 2021; Tan et al., 2021; Wendel et al., 2020; Zhijun et al., 2020). According to some researchers, the epidemic has had a negative impact on preschool children due to a lack of social contact and higher levels of stress, boredom, and anxiety. However, other scholars have also noted positive aspects, such as additional time for family activities, improved relations with parents and siblings, and the development of good behavioral traits (Egan et al., 2021; Hacin Beyazoglu et al., 2020; Mantovani et al., 2021; Mochida et al., 2021). Some studies examined the security and hardship issues surrounding the epidemic. For example, research by Gassman-Pines et al. (2020) shows that in families that have experienced multiple hardships (loss of employment, parents' loss of income, illness, caregiving burden) due to the coronavirus outbreak, the mental health of the children has suffered. Research by Glynn et al. (2021) points out that structured, predictable home environments provided by parents through family routines have protected children's mental health during the pandemic; moreover, "the associations between routines and child mental health symptoms persist after accounting for household characteristics (e.g., income, food security, dual parent household status) and maternal psychological distress (perceived stress and depressive symptoms)" (p. 5). This is confirmed by Mochida et al. (2021), suggesting that a permissive parenting style, as opposed to the repressive style, has encouraged positive behavioral traits in children during the COVID-19 epidemic.

Research on the impact of the epidemic on children's lives and development is generally focused on data obtained from parents or teachers. Less often, the data source is preschool children themselves. Notable exceptions are, for example, Kahuroa et al. (2021), who discuss children's working theories on their experiences, ideas, and feelings about the virus, and an analysis by Malta Campos and Fraga

Vieira (2021), who examine children's answers to questions about their experiences and feelings related to the epidemic. Other interesting exceptions include the studies by Pascal and Bertram (2021), who used storytelling techniques, rigorous documentation, and an analysis of children's narratives of their COVID-19 experiences, and Marjanovič Umek et al. (2021), who focused on children's answers to questions regarding their feelings and drawings of staying at home and drew conclusions concerning the positive and negative aspects of lockdown based on the children's perspectives. Nevertheless, this type of research is rare, and questions regarding children's self-reported feelings and perceptions regarding the lockdowns associated with COVID-19 remain unanswered.

Purpose of the Study

Considering that most previous research makes claims regarding the negative impact of closed preschools on children's well-being, our aim was to determine how children in Slovenia interpret their own well-being. A study on the feelings of preschool children during lockdown in Slovenia has already been conducted (Marjanovič Umek et al., 2021); however, the data analyzed in that study were collected after the first 8–9 weeks of preschool closure when Slovenia was still in the middle of lockdown, whereas the intention of our study was to explore the events occurring among children who were forced to stay at home longer. Our survey was conducted after 13–15 weeks of lockdown when preschools were already open again and children were able to return. Additionally, our aim was to determine how children understood the COVID-19 situation considering that it is often assumed that young children do not understand reality and require “difficult” themes to be explained in a child-like way (Short, 1999) and that children who receive more information regarding the pandemic from their parents experience more anxiety/depression problems (Cantiani et al., 2021).

The authors of this chapter along with university students enrolled in the post-graduate program in early childhood at the University of Ljubljana designed and conducted this research project based on a study of children's perspectives. The university students who participated in this research first familiarized themselves with the theory and the different methods and approaches to researching children in the Democratization of Preschool Education course and then had an opportunity to apply their knowledge in the project. The aims of the project were to (a) educate university students by providing them an opportunity to find appropriate approaches to elucidate children's perspectives and (b) discover how children felt during the lockdown and how they perceived the COVID-19 situation. This chapter reports an analysis and interpretation of children's answers complemented by some key information from the responses of their parents and teachers, who were also interviewed in this study.

The Context for the Study

One of the considerable advantages of Slovene early childhood education is the integrative system of public preschool designed for all preschool children between the ages of 1 (the end of the maternity leave) and 6 (the beginning of primary school). The wide range of quality public preschools that follow the state (national) curriculum ensures that they are accessible to all families. As a result, many children are enrolled: 82.7% of all children aged 1–5 and 94.1% of children aged 4–5. In the last decade, participation in the latter has increased by a quarter (Statistični urad Republike Slovenije (SURS), 2021).

In the second COVID-19 wave, which started on October 26, 2020, and ended on February 9, 2021, preschools and all other schools and universities were closed. Once it became clear that lockdown would last much longer than initially anticipated, the number of children in preschools started to increase, since emergency childcare was always provided for children whose parents held essential jobs, such as those working in hospitals. In the lockdown period, very strict protective measures were applied. As a standard, there were only six children per class with two teachers, one working in the morning and the other in the afternoon, with a few hours of overlap. Communication with parents was limited, and phone or email contact was recommended. Teachers and children did not wear masks in the classroom; nevertheless, masks were compulsory for all adults outside the classroom. The situation was similar to that in many other countries (Lafave et al., 2021; Pramling Samuelsson et al., 2020).

Instructions for work with children in the lockdown period were focused on hygiene and the prevention of infection at the expense of educational objectives. In particular, preschool education was completely overlooked. Reports, however, show that during the lockdown in spring 2020, some preschools took the initiative to offer support for families and provide distance education content (Center za kakovost v vzgoji in izobraževanju Korak za korakom, 2020) of their own accord. During the interviews, the university students who conducted the empirical part of our project, which is presented in the second part of this chapter, found that some preschools continued this practice during the second lockdown between October 2020 and February 2021.

Method

Even though our primary purpose was to study preschool children's self-reported perspectives, teachers and parents were also interviewed. Due to the high volume of data gathered, the analysis and interpretation of children's answers are emphasized in this chapter, but we also added some responses from participating teachers and parents to supplement children's answers.

Participants

Forty preschool children, 23 boys and 17 girls, participated in the interviews. Most children were from regional preschools (21), 9 children were from suburban preschools, and 8 children were from city preschools in Slovenia. No information is available for two children. The child participants in the study were 3.4–6.2 years old, and their average age was 5 years. During the lockdown period, more than half of the children in the study (21 children) were permanently absent from preschool, while 15 children regularly attended preschool. Four children were at home until December 2020 and then resumed in-person preschool.

Our sample of adult respondents included 11 preschool teachers who worked with the child participants in the study during the lockdown period and 33 parents (23 parents of children who were at home all or part of this time, and 10 parents of children who attended preschool in person throughout lockdown).

Instrument

Semi-structured interviews served as the data collection tool. When drafting the interview questions, research focusing on children's perspectives served as a guide (Clark, 2005; Kahuroa et al., 2021; Malta Campos & Fraga Vieira, 2021; Moss et al., 2005; O'Keeffe & McNally, 2021; Rinaldi, 2006); additionally, the university students relied on their personal experiences of working with children.

All children were asked the following questions:

1. Do you know what the coronavirus or COVID is? How do we have to behave to make sure we don't get infected?
2. You probably know that measures of how we have to behave in this period are in place to make sure as few people as possible get sick. Do you think this is right? Would you change anything if you set up the measures?
3. Were you in preschool or at home during this time (from autumn until recently)?

The children who spent lockdown at home were additionally asked the following questions:

4. Who was with you, your mum or dad? Did you stay with someone else (like your grandma and grandpa)?
5. Did you like it that you were . . . (question formulated in relation to the given situation)? Would you prefer to be in preschool?
6. How did you feel at home? What was different from preschool? What did you like and what did you not like? Did you miss anyone? What did you do and who did you spend most of the time with? Did you go to the playground? Could you play with other kids there?

The children who spent the lockdown in preschool were asked the following additional questions:

4. How did you feel in preschool where there were very few children in your group? What did you like and what didn't you like? Did you miss anyone? Would you prefer that you too didn't have to go to preschool? Why?

Participating children's parents and teachers were asked the following factual questions: the child's age, the preschool location (city, suburbia, or regional), and where and with whom the child stayed during the lockdown. The parents and teachers were also asked about how the children felt during this period, whether they missed anyone, and whether they noticed any lockdown-related changes in their children.

Data Collection

Before the interviews were conducted, children's parents were informed of our project and asked for permission to interview their child(ren) and whether they were willing to participate in the study. The teachers who worked with these children during the lockdown were also asked for their input. All university students (20) interviewed children they were acquainted with previously. Some children were in their class at preschool (where the university students worked as teachers) while others were the children of friends or relatives.

Because the participants were young children, there was an emphasis on research ethics in the preparation of the university students who conducted the interviews. The interviewers/university students learned about research ethics in a course in their program and broadened their awareness through independent reading. Before they started conducting interviews, they were again explicitly told that they were required to tell each child about what they wanted to talk to them about and why and that they did not have to answer any question if they did not want to. We emphasized the importance of knowing the child and each child's trust in the interviewer. The fact that the interviewer was not a stranger helped to establish rapport with the child.

The university students were tasked with finding and using the most appropriate approach for each child based on their coursework and their independent reading of the literature. The interview transcripts show that they used different approaches to encourage children to feel relaxed and express their ideas about COVID-19 (e.g., puppetry, symbolic play, or role-playing as journalists). Some university students interviewed children as they were playing or performing another activity (e.g., cut-outs or drawing). They were very careful to ensure that the interviewed child understood them; that is, they asked additional questions or reformulated the question in a more understandable way. The students were instructed to note not only children's verbal expressions but also their body language and behavioral and emotional signals that might underscore their agreement or disagreement with the interview content (Sandberg et al., 2017).

The interviews with the adults were performed orally or by email. All interviews were conducted in March 2021.

Data Analysis

Participating children's and adult's responses were analyzed using the qualitative method of content analysis (Hesse-Biber & Leavy 2004, 2011; Vogrinc, 2008). The university students decided whether to record the interviews or only take notes of the answers. All recorded interviews were transcribed, and all notes were organized in a presentable way. Then, the university students worked in smaller groups to create categories for each question and categorize the answers. These results were presented to and discussed with the whole group. Then, the researchers created the final categories and assigned the answers to these categories.

Results

The results of our research are presented in several sections. First, we present the answers provided by participating children, their parents, and their teachers to questions related to where and with whom the children spent time during the lockdown period and whether they would prefer to be in preschool or at home during this time. This discussion is followed by a discussion of the answers provided by all three groups regarding how children felt during this period, starting with the answers provided by children who stayed at home and their parents, followed by the answers provided by children who attended preschool and their parents and teachers. The final section presents children's perceptions of the COVID-19 situation and their suggestions for preventative measures.

Where and with Whom Children Spent the Lockdown Period

All children (21) who did not attend preschool during the lockdown period replied that they spent this time with one or both parents. Nine children also mentioned their siblings, and many spent some of this time with their grandparents. A boy, for example, told us, "My grandpa and my grandma were with me. And also, my mum and dad." Another replied, "Sometimes my brother and I played at my grandma and grandpa's when we went on holiday." This association of the epidemic circumstances with holidays was not unique. Another 4-year-old boy said that during this time, he was "At home on holiday." It is obvious that this period was quite chaotic and for most parents very difficult. One girl, for example, said that the adult she stayed with was "one day my mum, next day my dad, they took turns." Her mother in her interview explained that the parents took turns so that each parent spent two days with her; when this did not work out, the grandparents looked after the girl, and, for a few days, even their neighbor watched her.

When asked if they would have preferred to be in preschool during this period, 9 children said that if they could choose, they would prefer to stay at home. They supported their decision with arguments such as “would prefer to be at home because H. was not in preschool”; by listing their favorite activities (“at home I went to the playground with other kids” or “I could play and didn’t have to get up so early”); or by referring to other family members (“it’s better at home because we are all together”). The same number of children (9), however, answered that they would have preferred to be in preschool. They explained, “It was very boring at home, I’d prefer to be in preschool,” “I missed A. (a friend) and G. (her teacher),” or “It’s fun in preschool.” One girl replied, “I liked that my brother and I could play, but I didn’t like that we fought over toys. . . I would prefer to be in preschool.” Four children were undecided. One girl said, “Here and there. I like to be at preschool and at home.”

Of the four children who spent a part of the lockdown in preschool, two said that they would prefer to be at home, and two remained undecided. One girl explained, “Before, I missed preschool, but then I realized that it was fun to be at home too.”

For children who spent the entire period in preschool (15), we asked whether they would have preferred to not go to preschool. Five answered that they liked it there and did not want to be at home. They argued that the atmosphere in the preschool during this period was more relaxed (“We spent more time playing and we sang songs a lot”; “It’s nice in the preschool because of my friends and because my sister is naughty (at home)”; “Here I can eat and make a mess but at home my mum wouldn’t let me because she had work to do”). Eight children would have preferred to stay at home. Their most common argument was that their friends were not at preschool. One child was undecided and liked being at home and in preschool. One child did not answer the question.

Activities and Well-Being at Home

The children who did not attend preschool during this period (21) liked being at home mostly because of the activities that took place at home. When asked what they did at home, children unsurprisingly listed typical activities (playing, doing puzzles, coloring), physical activities (riding a bike, playing football with dad, playing outside), and family activities (walking with other family members, walking and playing with pets, visiting relatives, having visitors at home). Very often, they mentioned participation in everyday activities: “My dad and I sorted out engines,” “cooking with my mum,” “feeding cows,” “riding a tractor,” “helping in the cow shed,” “looking after chickens,” “chopping firewood with my uncle.” We assume that they liked these activities, since there are few opportunities to do them in our fast-paced and busy normal lives. Siegel and White (1982), in this respect, mention the segregation and isolation of children in children’s places, such as preschools and schools, where children find it hard to grow into the adult world. Considering that due to the COVID-19 epidemic, as some researchers claim (Atabay, 2021; Cantiani

et al., 2021), children are spending more time in front of TV and computer screens, it is interesting that only three children mentioned that while they were at home during this time, “I have a tablet at home,” “we (i.e., my sister and I) watched cartoons and YouTube,” “my mum gave me Facebook, and I saw my friend.” The children’s answers also highlighted what they missed in preschool (“I could eat whatever I liked,” “I did whatever I liked,” “I can eat sweets at home”) and what they did not like. Two children mentioned that at home, they did not have to lie down to rest. In preschools in Slovenia, after lunch, children typically must lie down and be quiet for at least some time (in some situations, for as long as 1.5 hours) even though this practice is questionable (Batistič Zorec & Jug Došler, 2016).

As many as 12 parents provided an explicit confirmation that the children enjoyed their time at home because they spent more time with their parents and siblings, they were allowed to sleep in, etc. Two parents specifically emphasized their children’s excitement about home- or farm-related activities. However, three parents claimed that their children initially enjoyed being at home but later started to miss preschool and their peers. In contrast, two children initially did not like the change but later became accustomed to being at home. The other parents stated that their children missed preschool, that they were bored at home with no friends when the adults had to work, or that the children did not show any changes in their behavior.

Our results agree with those reported in two other Slovene studies conducted thus far that also examined preschool children during the lockdown. Marjanovič Umek et al. (2021) reported that most children claimed that they felt well at home after 8–9 weeks of preschool closure. Their respondents claimed, similar to the children in our project, that they liked it at home because they could play and spend time in activities together with their siblings and parents. A study by Hacin Beyazoglu et al. (2020) showed that parents in general spent more quality time with their children during this period, which is less possible under normal conditions. Their conclusion additionally supports our finding that children who spent time at home during the epidemic enjoyed activities with their parents and siblings for which there is otherwise often not enough time.

To our question regarding what the children missed the most, all children, except for one (20), replied that they missed their friends. It is interesting that most children mentioned one or more friends by name, which means that children are already establishing relatively stable and firm friendships with their peers in preschool. Five children mentioned that they missed their teacher or the teacher’s assistant. Because of such answers, we were particularly interested in determining whether the children played with other children at a playground. Only three children said that they occasionally spent time at a public playground with other family members. Another three children mentioned that they played in the family’s backyard. However, children understood why this was so. They said, for example, “no, because there was corona.”

Most parents (14) believed that their children (greatly) missed preschool, their peers and their teachers. Three parents said that their children never mentioned this issue explicitly, but they assumed that they missed preschool based on the children’s behavior (e.g., “when we watched a video created by her teacher, we could see joy in

her eyes”; “he was in a much better mood when he went back to preschool again”). One parent said that their child mostly missed her teacher, four parents believed that their children did not miss preschool at all, and one parent did not answer this question. The sense of missing preschool could be alleviated to an extent by remote contacts. Hence, the parents were asked if there was any contact with the children’s preschool during the lockdown. Those who had such contacts (10) mentioned such things as: (1) receiving instructions and recommendations for activities that the children could perform at home, (2) contacting their child’s teacher via email, (3) viewing a short video created by the teachers; or (4) setting up online contact with the child’s friends. Two parents said that there were no direct contacts; instead, they viewed old photographs from preschool.

To the question regarding whether they noticed any behavioral or emotional changes in their children during the time at home, most parents (12) said that they noticed no significant changes, whereas four parents mentioned that their children became more bored or frustrated. The other parents said that their child initially tended to cry more and demanded more attention but later became angry; that “he was often moody”; “that she wanted them to help her with the things she knew how to do herself”; that “she forgot some social skills, such as properly using cutlery”; that the child’s behavior showed he had “too much freedom”; and that he quickly lost attention and motivation. One parent mentioned that the child was currently even more attached to his home and family.

In contrast to some other research results (Malta Campos & Fraga Vieira, 2021), other than the children saying that they missed their friends or company, they did not mention any negative feelings. When asked whether they were afraid because of the COVID-19 epidemic, none of the children said that they were. Two children, however, said that they were (sometimes) bored at home, which has also been reported by other researchers (Atabey, 2021; Marjanovič Umek et al., 2021).

Well-Being of Children Who Attended Preschool

As mentioned, in this period, 15 children regularly attended preschool, and 4 attended only some of the time. One intention of our study was to determine how the children felt there and what they liked and did not like.

Most responses were positive. The children said that they played a lot (4) and that they had more toys available than normal (e.g., “we had toys, a trolley and all puppets,” “there were more blocks for me”). One child added that they spent more time talking to each other. Two children said that they had a friend at preschool, and one girl said that she made new friends. As the classes were rearranged during the lockdown period, children were often in classes together with their siblings. One child thus pointed out that he liked playing with his brother. Two children mentioned their interactions with their teacher: “A. played with us”; “B. let me do her hair.”

The teachers’ answers complemented the children’s answers. Most teachers (8) assessed that the children enjoyed their time at preschool (“they had fun,”

“they had a very good time,” “they loved coming to preschool”). The teachers believed that the children liked having smaller groups, as each child received more attention and there was a better atmosphere in each class. Some teachers mentioned that initially, there were some problems due to the reorganization of classes; nevertheless, they noticed no significant anxieties in the children or desire to be at home rather than at preschool.

Thus, the atmosphere in the preschools was more relaxed than normal mostly due to the smaller classes. However, the children’s thoughts are important to us in terms of educational work in general. Currently, in preschools, there can be too much rushing and not enough time for talking and free play.

Answers to the question related to what children did not like at preschool during the lockdown mostly related to social relationships. The most frequent answer was that they missed a specific friend or friends in general (7). One of them said that he did not like it “because there were few of us,” while one girl complained that “I was bored because V. and K. didn’t want to play with me.” Two other children mentioned that they were bored, which they related to the absence of the friends with which they normally played. These answers show that some children felt some unease about the different arrangements: they did not like a different playroom or a different class setup (e.g., “there were babies”). However, one boy liked the mixed-age setup and said, “I was the biggest and could help (prepare the tables for meals).” In this group, too, no child answered that the COVID-19 epidemic scared them.

The teachers also noticed a few challenges and problems facing the children in lockdown. Three teachers said that some children were initially anxious about the differently organized classes (with another teacher or mixed-age classes); one teacher noticed that this issue was mainly a problem for younger children who were not with their usual teacher. Two respondents said that those children who had their siblings in the newly organized class found it easier to adjust, whereas one teacher assessed the impact of mixing different ages as very positive (new friendships and more social interactions between the sexes). Almost all respondents (9) said that children missed their absent peers (friends) and were often asked when they were going to return. One teacher also said that children missed their regular teacher. However, the teachers were not asked much about the virus or related measures; some teachers (4) believed that children learned about this topic from their parents. One teacher added that most frequently, the children asked when the lockdown was going to end and when they would be able to return to their regular class.

Most parents of the children who attended preschool during the lockdown (7) replied that their children were happy or very happy. The remaining three parents mentioned that their children had some initial difficulties adjusting to the reorganized classes (another teacher, absent friends, mixed ages, another preschool); however, this difficulty did not last long for two children. Only for one child, his parents said that he missed his teacher and children from his class throughout this period.

Perceptions of the COVID-19 Situation and Children's Suggestions

Given current scholars' interest in "children's theories" or "working theories" (Dahlberg & Moss, 2005; Kahuroa et al., 2021; Rinaldi, 2006), we were particularly interested in how the children perceived the COVID-19 situation and the introduced preventative measures. To obtain a better understanding of children's responses, parents were asked whether their children were inquisitive about the virus and the lockdown situation and, if so, what questions they asked. Many parents (16) said that they initially explained the situation and why children had to stay at home; several parents (7) believed that this was the reason why their children did not pose further questions regarding the situation. Other parents (15) said that their children mainly questioned why they had to stay at home (for so long), why they were not allowed to visit a playground, and when the epidemic would end. Only one parent replied that their child did not ask any questions because he was happy at home, and one parent did not provide any answer.

Children's answers show that they are surprisingly well informed about the virus and the preventative measures. This proves that they are capable of understanding abstract concepts, such as "virus" and "epidemic." They offered very imaginative descriptions of the virus: "a very small ball with spikes"; "a small dot that you can't see"; "like a circle surrounded by toothpicks"; "a virus with volcanoes turned upside down all over it, a green circle." Their answers led us to conclude that they must have seen pictures of the virus as presented on TV and other media, and this left an impression. Their answers also made it clear that they confounded "virus" and "germ": "a germ that circulates"; "a germ that gets from the mouth into your nose," "a germ that jumps." They are aware that the virus causes illness, describing an "illness due to which we can die, you can go to hospital" and related symptoms (cough, headache, hoarseness, runny nose, increased temperature). One child explained, "If you get a cold, you go for a test, this is horrible." Another child said that he was tested, and two even mentioned vaccination.

Children interviewed in the study exhibited awareness of the measures that had to be implemented during the epidemic. Almost everyone mentioned masks ("we wear a mask so that we don't breathe germs in"), hand washing ("when you come from the shop") and sanitizing. They mentioned other hygiene measures as well: "We have to sneeze in the sleeve or in the shoulder"; "we don't throw things on the floor; we don't lick toys and we don't spit." They understood the importance of physical distancing: "We have to stay away from other people," "we don't meet, kiss or hug." One child mentioned that "we have to stay at home if we are sick." The children probably followed the news and listened to conversations among adults. For example, one child said to his interviewer, "Do you know that when we get to the yellow zone, there will be no curfew?" From 40 children, we received only one answer that showed poor understanding of the virus: "Corona is a poisonous disease. It infected children so that they could no longer come to preschool, they were poisoned..."

There is something that's sprayed and then COVID no longer exists." Nevertheless, the same girl understood the preventative measures: "It is contracted by people who don't maintain personal hygiene and don't use soap after going to the toilet."

Our results show that participating children received appropriate and understandable information from their parents and other adults, as they knew much about the virus and the measures they had to adhere to. As we previously mentioned, no child said that he or she was frightened, even though children were aware that COVID-19 is a very serious disease that could be, in the most extreme cases, deadly.

As our position from the outset was that children were competent, they were also asked how they evaluated the preventative measures, whether they agreed with such measures and whether they would make any changes. A quarter of the children (10) replied that the measures were fine ("we can't change anything," "we have to behave not to infect anyone"). One child gave a surprisingly mature response, i.e., "No, because it's not me who can say this." We assume he understood that the measures were decided upon by experts. Some children's suggestions were general (e.g., "I would put the virus away, we don't need it"; "so that we can do everything every day"; "that all kids could come to preschool, we would play and laugh"). Other children would mostly change the things they did not like about the epidemic and the related measures, such as being able to meet with friends or play with children from other classes; three children wished they did not have to wash their hands so much. One boy, however, said that he preferred hand sanitizer ("you just spray") to hand washing because it was faster. Most comments were related to mask-wearing: one said that he did not like it when the teacher wore a mask, while two drew on their own experience: "I don't like the mask, when I speak it's always in the way there"; "my nose gets exposed and when I breathe in it gets into my mouth." However, we also found a child who liked wearing a mask: "because I can hide underneath, but my mum says that I don't need it yet." This question made some children focus on what they wanted as follows: "to go to another town; I can't go anywhere now"; "not to have preschools or schools closed"; "I would change the measures so that they wouldn't apply to good children."

Discussion

Considering that our results show children as being well informed about the virus and related measures, we were surprised by the findings of Cantiani et al. (2021) revealing "a trend indicating that explanations on the pandemic given to children were surprisingly positively correlated with an increase in anxiety/depression problems: children who received more information by parents were those suffering more" (p. 12). Our project findings seem to suggest that children who were better informed were less worried or afraid. The key issue here is the quality of such information: if it is not realistic, i.e., emphasizes only the worst possible consequences of COVID-19, or if the aim is to generate fear rather than caution and

respect for preventative measures, such information may increase the level of anxiety, as reported in the above-mentioned study. In our interviews with the parents, we also encountered a case in which a story published on the internet (Mini rokice, 2020) was read to the 7-year-old brother of one of the interviewed children, which caused fear and anxiety. It is our belief that the story is of dubious quality, as it aims to frighten and highlights only the most terrifying consequences of COVID-19. Its author obviously did not consider what emotional reactions it could cause. In addition to offering an inappropriate message, this approach to children reflects the commonly held conviction among adults that children do not understand reality and that they need to be served “difficult” themes in a childish way (Short, 1999) – in this case, a fairy tale about a virus that kills people. In contrast, Pascal and Bertram (2021) found that children desired authentic and real information and explanations about the coronavirus.

Developmental psychology based on Piagetian theory describes children in the preschool phase as preoperational thinkers who are egocentric and thus unable to understand abstract concepts (Piaget & Inhelder, 1990). They reason from specific to specific, and they develop cliché judgments because of their limited experiences, so it is relatively difficult for them to understand such an abstract concept as a virus (Atabey, 2021). Reggio Emilia pedagogues, however, avoid such developmental categorizations. Malaguzzi (as quoted in Gandini, 1993) says that they moved away from the image of the child as an egocentric being, instead carefully observing and recording children’s behavior to learn about them. The Reggio Emilia approach emphasizes that it is important to listen to children’s ideas, explanations, and imaginings and to try to understand their cognitive process when they are acquiring new knowledge (Giudici et al., 2008) without any preconceived ideas about what is right or wrong (Dahlberg & Moss, 2005). The above-mentioned children’s replies only confirm this approach. In accordance with theories that position children in their social context (e.g., Bronfenbrenner, 1979), it is important to take into account children’s rich experience acquired at home and in their wider environment as well as their interests, knowledge, and skills (Kahuroa et al., 2021) when interpreting their replies. While one of the studies with children came to the conclusion “that part of the children use fantasy resources in a healthy and symbolic way to cope with the disease” and that “identification and aggression processes also appear in some speeches...” (Almeida & Rentes, 2020, p. 4, as quoted in Malta Campos & Fraga Vieira, 2021, 136), children’s answers in our study were mostly realistic, and we found no aggression or fear. Our project confirms findings by Pascal & Bertram (2021) that children have a good understanding and knowledge of the coronavirus and its impact on daily life. To emphasize this, let us quote two answers by children expressing criticism regarding the preventative measures and respect for them. A 6-year-old girl told us, “It would be better if we all stayed at home and all shops closed and everything closed would be better; now something is closed and something is open and corona is only spreading around us.” Another, a slightly younger girl, said, “Yes, but not all people respect them, some don’t put their hand in front of their mouth when they sneeze or cough.”

Implications/Recommendations

What are the implications of our project for teachers and policymakers? We agree with Pattnaik and Jalongo (2021) that entire nations are unprepared and underprepared to support the care and education of children when confronted by a global health crisis and that it is essential to make the care and education of young children a top priority. Slovenia is no exception. Considering that the epidemic is unpredictable, it is urgent to think about how to ensure frequent social contact between children and their teachers if preschools close again. As the greatest burden of care during lockdown falls on the child's parents, it is also important to find ways to help parents at the national level (e.g., flexible working hours, part-time work, potential inclusion of volunteers to engage children remotely, assistance from university students in higher education departments) to balance family and work. It would also be very helpful if preschool teachers could provide materials and ideas on how to spend enjoyable time with children without the schoolification of children and parents (Formosinho, 2021). Most of all, however, it is important to encourage parents and their teachers to not hide the real circumstances from children or frighten them but rather to provide an accurate and realistic picture of the situation, in line, of course, with what the child is able to understand and is interested in. When children return to preschool, however, it is paramount to provide a safe environment and enough time for free play in which children can re-establish relationships with their peers and their teachers. Preschool teachers need to observe children carefully and give them sufficient opportunity to share their experiences. In this way, children can express their understanding of the situation and themselves in it and process their own potentially traumatic experiences from the lockdown period (Kahuroa et al., 2021). In this context, we support the principle that less and slower is more (Egan et al., 2021).

From the children we also heard some critical thoughts about daily routine that are still present in preschools in Slovenia, such as forcing children to rest or pressuring children to eat, and insight into what they truly like (e.g., when their teacher plays with them, conversations). Children obviously like it when their teacher plays with them. A study of teachers' views and methods (Batistič Zorec, 2010) shows that teachers often do not understand the importance of participation in children's free play, in which they can facilitate learning if they participate as mentally more mature partners (Zupančič, 2001). Undoubtedly, children's critiques need to be considered by teachers when evaluating their educational work.

Strengths and Limitations

An advantage of our project is its child-focused approach, which provides insight into children's perspectives rather than providing adults' interpretations on children's behalf. Few studies of this nature have been conducted in Slovenia or elsewhere. This research project is the first to analyze preschoolers' understanding of the COVID-19 situation in Slovenia.

Admittedly, our study also has some limitations. First, this study was carried out by several interviewers who used different approaches, which led to differences in the level of respect for the given instructions and different circumstances. Another limitation is the small and convenience sample, which does not include children from vulnerable groups. It is necessary to note, however, that these results relate to the current situation only, leaving it unclear what this kind of life means for children long-term, especially as the risk of another lockdown is a persistent possibility. In April this year, 2 months after preschools reopened, Slovenia faced another closure that fortunately lasted only 10 days. Such developments are not encouraging, because preschool children need a safe and predictable environment in order to thrive.

Conclusion

Contrary to the results of several other studies (Atabey, 2021; Wendel et al., 2020; Zhijun et al., 2020), ours show that preschool children mostly enjoyed the lockdown period. The answers provided by children who stayed at home during this period did not differ much from those of children who attended preschool. Those who stayed at home mostly enjoyed more family activities with their parents and siblings, while those who attended preschool mostly enjoyed the more relaxed atmosphere and smaller number of children in their classes. Based on the interview data, we assume that it was mostly the positive attitude expressed by the parents and teachers, the safe environment, adaptation to the situation and routines, and the ability of the parents to balance their time between family and work that helped the children experience this period as relatively stress-free and free from fear of an unknown disease (Glynn et al., 2021; Hacin Beyazogly et al., 2020; Mochida et al., 2021).

Even though the children felt well regardless of their location during the lockdown (at home or in preschool), under half of those who spent their time at home preferred to be in preschool, while slightly more than half of those who were in preschool preferred to stay at home. However, in both cases, the most frequent argument was that they missed their friends, which shows that similar to the findings of other research, social contacts are of key importance for children of this age (Malta Campos & Fraga Vieira, 2021; Mantovani et al., 2021; Marjanovič et al., 2021).

Additionally, these results suggest that preschool children possess valid knowledge, views, and feelings about the coronavirus and lockdown that they are able to express if given the opportunity (Kahuroa et al., 2021; Malta Campos & Fraga Vieira, 2021; Pascal & Bertram, 2021). Our findings indicate that children do not need to be told childish stories about the virus; instead, they need authentic information to make better sense of the circumstances surrounding them. We could even speculate that in cases such as the epidemic, it is necessary to be even more truthful with children, since neuroticism, as claimed by Millot (1983), is mostly related to lies.

The results also show children's feelings about preschool. These are mostly encouraging, since most children like attending preschool. Undoubtedly, good-quality preschools facilitate children's development and learning and provide different content than that received in the family; therefore, it is important to know that children also value the activities that take place in preschools. However, most importantly, children value the social contacts they establish there, especially with their peers. However, their answers also provide criticism of some inappropriate practices mentioned above. We agree with Kjörholt (2005), who claims that children's voices reflect the moral and social environment of which they are a part and that listening to children also means thinking critically about adults' practices in children's institutions.

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Part II
Wellbeing in Early Childhood Personnel

Chapter 7

Wellbeing During the COVID-19 Pandemic: Perspectives of Australian Early Childhood Educators



Lisa Murray , Patricia Eadie, Amelia Church, Penny Levickis, and Jane Page

Prior to the COVID-19 pandemic, the wellbeing of the early childhood education (ECE) workforce was already a significant policy and practice issue, both in Australia and internationally (Irvine et al., 2016; Organisation for Economic Co-operation and Development, 2019; Whitebook et al., 2014). Evidence from the past decade has documented extensive challenges for the ECE workforce including incommensurate pay, poor working conditions, high workloads, lack of professional autonomy and status, lack of appreciation from parents, challenging child behaviours, and limited opportunities for professional development or career progression (Boyd, 2013; Faulkner et al., 2016; Jena-Crottet, 2017). The consequences of this are reflected in high levels of educator stress and burnout (Li et al., 2020; Løvsgren, 2016), as well as difficulties attracting and retaining qualified educators (Press et al., 2015; Whitebook et al., 2014). The COVID-19 pandemic has added further pressure to the ECE sector, exacerbating existing stressors and presenting unprecedented mental health and financial hardships for many early childhood (EC) educators (Tate, 2021; The Front Project, 2020).

Evidence suggests the quality of early learning programs provided to young children and families is most strongly influenced by the professionals who work within them (Hamre, 2014; Manning et al., 2017); therefore, maintaining a well-qualified ECE workforce who are physically, emotionally, and mentally well is

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critical to supporting young children's learning and development. The consequences of poor EC educator wellbeing have been associated with reduced ECE program quality (Buettner et al., 2016; Seo & Yuh, 2021; Whitaker et al., 2015) and adverse behavioural, emotional, and learning outcomes for children (Cassidy et al., 2016; Jeon et al., 2014). High levels of staff turnover resulting from educator stress can also disrupt parental workforce participation (Pascoe & Brennan, 2017). As such, supporting EC educator wellbeing is not only inherently important as it effects the lives of individuals, it can also deliver significant flow-on benefits in supporting the wellbeing and development of young children and promoting a flourishing society.

While existing research has documented the adverse consequences of poor EC educator wellbeing, less is known about wellbeing from the perspectives of EC educators themselves. This qualitative study sought to describe Australian EC educators' definitions of and experiences with wellbeing during the COVID-19 pandemic. Documenting and understanding educators' beliefs and experiences in relation to wellbeing is critical if ECE services are to design and implement targeted supports for wellbeing that are fit for purpose and have the potential to make a positive impact.

Background

To explain the context of this study, the following section briefly describes ECE in Australia and the impact of the COVID-19 pandemic. Existing definitions of educator wellbeing in the literature are explored, followed by a discussion of conceptual frameworks that can be used to understand the interdependent elements of educator wellbeing.

Early Childhood Education in Australia

Over the past decade, a range of significant national policy reforms including the introduction of the National Quality Framework and accreditation system, and the development of the Early Years Learning Framework (Australian Government Department of Education and Training, 2009) have aimed to improve the quality and consistency of ECE service provision across Australia. However, the sector continues to face long-entrenched challenges that need to be addressed to improve the quality of ECE experienced by all Australian children (ACECQA, 2021; Jackson, 2020; Pascoe & Brennan, 2017). Not least of these challenges is the ongoing shortage of qualified EC educators (Press et al., 2015) and high levels of staff turnover. A national ECE workforce study found an annual staff turnover rate of 37%, with even higher rates in remote locations and areas of greater socioeconomic disadvantage where quality ECE is most needed (Irvine et al., 2016; Thorpe et al., 2020).

Studies suggest that some of the key reasons for ECE staff shortages include overwhelming workloads, limited opportunities for career progression, and high levels of educator stress and emotional exhaustion (Cumming, 2017; Logan et al., 2020; Press et al., 2015). All of these challenges are exacerbated by poor pay,

difficult working conditions, and lack of public recognition (Irvine et al., 2016; Press et al., 2015; Thorpe et al., 2020). Indeed, EC educators are the most poorly paid in the Australian education sector (McDonald et al., 2018), meaning they are contending with issues such as financial strain and feeling undervalued in addition to the day-to-day emotional labour of their work (Irvine et al., 2016).

During the COVID-19 pandemic, Australian early childhood educators were contending with even greater pressures, as they were required to navigate rapid changes to policy, funding, and work arrangements – often while experiencing financial insecurity and uncertainty about their future employment (The Front Project, 2020; Quinones et al., 2020). This was especially challenging in the state of Victoria, in the southeast of Australia, where ECE services remained open for vulnerable children and children of essential workers, while also providing remote support for children’s learning at home during prolonged periods of lockdowns. Studies conducted with Australian EC educators indicate the pandemic has taken a heavy emotional toll, with the impact of stressful working conditions heightened by feeling devalued as a sector (Quinones et al., 2020). Research also shows that the wellbeing and mental health of many families and young children attending ECE services have been affected by the ongoing uncertainty of the pandemic (De Young et al., 2021). Of particular concern, the social and economic impacts of the COVID-19 pandemic have been disproportionately experienced by vulnerable families, serving to widen the gap between advantaged and disadvantaged children (De Young et al., 2021). Since quality ECE can provide a buffer against stressful home environments (Berry et al., 2016), EC educators must be supported in their capacity to care for children and families. Indeed, under any circumstances the wellbeing of EC educators must be adequately supported; in the midst of the COVID-19 pandemic, this task must be realised with a renewed sense of urgency.

Defining Wellbeing

Western concepts of psychological wellbeing are usually based on two distinct but related philosophies: hedonism and eudaimonism. Viewed through a hedonic lens, wellbeing is equated with the experience of happiness or pleasure, while eudaimonic perspectives emphasise the importance of being true to one’s inner self, experiencing purpose or meaning, and achieving one’s full potential (Estola et al., 2014). Although both perspectives are considered to contribute to wellbeing, empirical research suggests that behaviours and outlooks reflecting an eudaimonic approach are more important for long-term wellbeing than hedonic approaches (McMahan & Estes, 2011; Ryff & Singer, 2008). Specifically, studies have found that an individual’s orientation to meaning and engagement are more closely related with life satisfaction than behaviours aimed at experiencing shorter-term gratification or obtaining material possessions (McMahan & Estes, 2011; Park et al., 2009). Yet a meta-analysis of preschool educator wellbeing found that most of the published wellbeing research in education had emphasised the hedonistic tradition, in that they

had largely focused on job satisfaction and experiences of enjoyment at work (Hall-Kenyon et al., 2014). Studies of educator perspectives on wellbeing, therefore, need to take into account a more holistic definition of educator wellbeing that also encompasses eudaimonic perspectives of wellbeing, such as educators' intrinsic motivations and values, and their sense of professional belonging, purpose, and contribution to others.

Defining educator wellbeing and establishing a consensus on how to maximise and sustain wellbeing has been a challenging proposition for research and policymakers, given that there are numerous and overlapping definitions of wellbeing described in the literature (Carter & Andersen, 2019; Cumming & Wong 2019). The term "wellbeing" is often used interchangeably with other terms such as "happiness", "life satisfaction", and "wellness", which have different interpretations and underlying meanings (Carter & Andersen, 2019; Cumming & Wong, 2019). In Cumming and Wong's (2019) systematic review of early childhood educator wellbeing literature, the authors note that many studies have focused on distinct aspects of wellbeing, such as emotional wellbeing (Faulkner et al., 2016), financial wellbeing (King et al., 2016), physical health or psychological wellbeing (Henry et al., 2021; Whitaker et al., 2015), and work-related wellbeing (Logan et al., 2020). Studies have also identified the individual characteristics of educators that can support wellbeing, such as resilience, mindfulness, self-compassion, and self-efficacy (Jennings, 2015; Seo & Yuh, 2021; Zee & Koomen, 2016), and highlighted the outcomes of poor wellbeing, including high rates of educator stress, emotional exhaustion, and burnout (Corr et al., 2014; Jena-Crottet, 2017). The local cultural context also influences educator wellbeing, with pay, status and employment conditions varying across countries and regions. To account for these dynamic influences on wellbeing, Cumming & Wong (2019) draw on multidisciplinary perspectives to propose a holistic conceptualisation of wellbeing as a 'dynamic state, involving the interaction of individual, relational, work-environmental and sociocultural-political aspects and contexts' (Cumming & Wong 2019, p. 276).

Theoretical Framework

Cumming and Wong's (2019) definition of wellbeing is consistent with Bronfenbrenner's (1979) multileveled ecological systems theory of human development, which recognises that individuals are influenced by a complex and interactive system of relationships in their immediate and wider environment. This theoretical approach acknowledges the importance of individual, relational and contextual influences on wellbeing, providing a theoretical approach which is suited to exploring the complexities of EC educators' wellbeing. As such, the methods used in this study are informed by socioecological theory.

The Current Study

Educator wellbeing was identified as a priority research topic – even before the onset of the COVID-19 pandemic – by a Research Network of Early Childhood Professionals in Australia at the end of 2019 (see Eadie et al., 2021). Our research was thus developed in response to a research priority identified by educators themselves, as well as in recognition of the additional demands on educators arising from the pandemic. The following study is nested within a larger online research project exploring EC educator wellbeing within the unique context of the COVID-19 pandemic. In this chapter, we are reporting on qualitative data captured via an online survey and focus groups in relation to Australian EC educators' perspectives about the meaning and importance of educator wellbeing.

Methods

This mixed-methods project used an online survey followed by online focus groups to explore Australian EC educators' perspectives about wellbeing during the COVID-19 pandemic. Online methods were used in response to the restrictions necessitated by COVID-19, and to seek input from EC educators across Australia with minimal intrusion. Ethical approval was obtained from the relevant Human Research Ethics Committee prior to the study commencing. The findings reported in this chapter focus on the qualitative data reported by educators (see further details about the instruments below). Essentially, the survey and focus group data aimed to explore the following research questions, within the context of the global pandemic:

1. What are Australian early childhood educators' perspectives about the meaning of wellbeing?
2. What are Australian early childhood educators' perspectives about the importance of wellbeing?
3. What are the implications for practice and policy in terms of supporting educator wellbeing?

Participants and Recruitment

Between July and October 2020, EC professionals from across Australia were invited to participate in this study. A convenience sampling technique was used, whereby participants were recruited through an established Research Network of Early Childhood Professionals and via the authors' broader ECE networks in Australia. This approach was used to enable the expedient collection of data from a convenience sample of volunteers and to respond directly to the Research Network's previously established research priorities. Information about the study and a

link to the online survey was distributed to network members and other EC educators via email and social media. All participants provided informed consent to participate in the study via the online survey. A total of 209 participants responded to the open-ended questions in relation to the meaning and importance of educator wellbeing, and of these, 15 educators also participated in the subsequent focus groups. Data from all 209 participants are included in the analyses that follow.

Approximately two-thirds of participants were from Victoria (71.8%) and 70.8% were working in metropolitan regions of Australia. Participants' roles were mixed, including lead teacher/educators (36.8%), assistant teacher/educators (22.0%), educational leaders (14.8%), centre directors (14.3%), and family day care educator/owners (9.6%). Most participants worked with children aged 3–5 years old (45.5%) and with children of mixed ages (39.7%). More than a third of all participants (35.9%) had over 20 years' experience working in ECE, while 14.4% of participants had worked in ECE for less than 5 years. Just over half of the participants were working at centre-based long day care services (52.6%), with around a third working at a stand-alone kindergarten/preschool (33.9%) and 9.8% working at Family Day Care services. Table 7.1 provides participant characteristics.

Instruments and Data Collection

The survey for the wider study comprised four core components: (1) demographic questions designed by the research team (e.g., role, service type, location); (2) the Early Childhood Professional Wellbeing (ECPW) scale (McMullen et al., 2020); (3) the Student–Teacher Relationship Scale (STRS) short form (Pianta, 2001) modified for staff wellness (see Whitaker et al., 2015); and (4) author-designed questions that aimed to elicit educators' experiences and perspectives of wellbeing during the pandemic. In this chapter, we are reporting on qualitative data captured in components 1 and 4 of the online survey (i.e. open-ended questions), and in the subsequent focus groups (see Appendix). Quantitative findings from components 2 and 3 of the online survey are reported elsewhere (see Eadie et al., 2021).

The open-ended questions from the survey and focus groups asked educators to define and describe the importance of wellbeing, and to comment on their experiences of wellbeing during the pandemic. In-depth, semi-structured focus groups were an appropriate method to elicit further perspectives and to develop a richer and more nuanced understanding of open-ended survey responses (Creswell, 2014). The online survey took participants approximately 20 min to complete, while the focus groups lasted 1–2 h. Three focus groups were facilitated by two of the authors and were conducted online via Zoom. A semi-structured group format was used to capitalise on exchanges between participants, and to allow participants to compare and comment on each other's experiences (Kitzinger, 1995).

Table 7.1 Participant characteristics

Participant role	Survey participants (<i>n</i> = 209)		Focus group participants (<i>n</i> = 15)	
	<i>n</i>	%	<i>n</i>	%
Assistant teacher/educator	46	22.01%	1	6.67%
Lead teacher/educator	77	36.84%	6	40.00%
Educational leader	31	14.83%	5	33.33%
Centre director	30	14.35%	3	20.00%
Family day care owner/educator	20	9.57%		
Other (e.g. playgroup leader)	5	2.39%		
Years of experience				
Less than 5 years	30	14.35%		
6–10 years	48	22.97%	2	13.33%
11–20 years	56	26.79%	6	40.00%
21–30 years	50	23.92%	4	26.67%
More than 30 years	25	11.96%	3	20.00%
Working hours				
Full-time	126	60.29%		
Part-time	80	38.28%		
Casual	3	1.44%		
Age of children in room				
0–2-year-old	15	7.18%		
2–3-year-old	16	7.66%		
3–5-year-old	95	45.45%		
Mixed ages	83	39.71%		
Service type				
Centre-based LDC (non-profit)	59	28.23%	5	33.33
Centre-based LDC (private)	51	24.40%	3	20
Kindergarten/preschool (non-profit)	54	25.84%	7	46.67
Kindergarten/preschool (private)	17	8.13%		
Family day care	20	9.57%		
Occasional care/other	8	3.83%		
Service location				
Metropolitan	148	70.81%	10	66.67
Regional	44	21.05%	4	26.67
Rural/remote	17	8.13%	1	6.67
Service state				
Victoria	150	71.77%	14	93.33
New South Wales	31	14.83%	1	6.67
South Australia	4	1.91%		
Western Australia	4	1.91%		
Tasmania	2	0.96%		
Queensland	14	6.70%		
Australian capital territory	4	1.91%		

Data Analyses

The theoretical assumptions embedded in the socioecological theory informed the data analysis procedure for this study; that is, wellbeing is multidimensional, dynamic, person-specific, and context-specific in nature (King et al., 2014). Data from the focus groups and open-ended survey questions were thematically analysed using Braun and Clarke's (2019) method of reflexive thematic analysis to identify patterns of shared meaning. This method of analysis is suitable for interpreting data related to people's experiences, views, and perceptions, as well as their understanding of concepts (Braun & Clarke, 2019). The analytic process was exploratory, flexible, and recursive in nature, involving deep and ongoing engagement with the data to generate overarching themes organised by a central idea. The process of analysis involved familiarisation with the raw data, coding important features of the data in relation to the research questions, generating broad patterns of meaning (or overarching themes), reviewing and refining the themes, and, finally, defining, naming, and determining the "story" of each theme. Two members of the research team collaboratively coded the data to ensure a rich and robust interpretation of the data.

Findings

Participants in the survey and focus groups were asked to describe wellbeing broadly, hence their perspectives of wellbeing encompassed both their professional and life experiences. Eudaimonic perspectives of wellbeing were more evident than hedonic approaches, with educators emphasising the importance of being able to perform their roles optimally and engage in meaningful work. Five key themes emerged from the data analysis in relation to educators' perspectives about the meaning and importance of wellbeing: (1) holistic wellbeing as a personal and collective responsibility; (2) healthy boundaries and work-life balance; (3) supportive relationships; (4) professional purpose and contribution; and (5) professional recognition and status. Each of these themes evident in the data will be detailed in the following sections, using examples from the raw data to illustrate the findings in educators' own voices. "S" refers to survey responses and "FG" refers to focus group responses.

Holistic Wellbeing as a Personal and Collective Responsibility

Participants identified psychological, physical, emotional, and spiritual aspects of wellbeing, defining their personal health and wellbeing as a holistic concept. For example, wellbeing was described as "*having my physical, mental, emotional and spiritual needs met*" (S34) and "*[being] healthy in mind, body and soul*" (S28).

Participants acknowledged the emotional and physical demands inherent in their professional work – “*it’s a tough job*” (FG3–1); “*early childhood education is very taxing, emotionally, mentally and physically*” (S36); and thus the importance of practising self-care to maintain a healthy mind and body: “*My body is my tool*” (S43), “*[wellbeing means] self-care, nutrition and exercise and social connections*” (S161), and “*taking care of yourself, [getting] enough sleep, being kind to yourself*” (S89). In view of the demands of their role, participants also highlighted the importance of personal resilience: “*[wellbeing means] being resilient enough to bounce back from set-backs*” (S11) and “*wellbeing is how you deal with your day-to-day stresses*” (FG1–3). Strong personal wellbeing and resilience were described as essential “*because burnout is significant in ECE*” (S200) and “*if you don’t have your wellbeing on track you get burned out*” (S57). For some participants, the importance of focusing on personal wellbeing had been highlighted due to the challenges of the pandemic: “*I think through this whole COVID thing, a lot of things have come to surface*” (FG2–3); “*I’ve learnt different skills how to cope with disappointments or frustrations*” (FG3–4); and “*a real positive thing that has come out of it is that. . . actually, small things can make a huge difference*” (FG3–5).

While the importance of proactively managing personal wellbeing was made clear, educators also identified that wellbeing is influenced by external, socio-cultural factors: “*[wellbeing] is influenced by personal factors, the workplace, the culture and management support*” (S165) and “*[wellbeing means] that you are taken good care of by other staff and management*” (S67). Moreover, educators expressed a belief that wellbeing should be both a personal and collective responsibility, “*while the environment needs to be supportive, educators need to take some personal responsibility for their wellbeing too,*” (S20) and “*[wellbeing] means taking personal responsibility but also feeling supported in this area*” (S42). The challenges of the pandemic meant that for some educators, both personal and collective approaches to supporting wellbeing had not always been prioritised: “*Personal wellbeing has taken a major back seat this year and there is almost pressure to sort it out yourself - almost like personal wellbeing is your own problem, rather than being a community concern*” (S81).

Healthy Boundaries and Work-Life Balance

Definitions of wellbeing were not constrained to educators’ professional working roles, with participants identifying the importance of balancing work and home responsibilities to maintain health and happiness in work and life, described as “*a happy and highly satisfied lifestyle*” (S78). As explained by participants, wellbeing means “*feeling generally well and enthusiastic about life*” (S11) and “*enjoyment of life at all times*” (S22). In this context, participants positioned wellbeing as a right: “*everyone has the right to be healthy and happy in both work and life*” (S119) and “*to fully participate in all that life has to offer*” (S114). Participants also highlighted the importance of establishing healthy boundaries between work and life

responsibilities, describing wellbeing as “*being able to keep perspective on life, not being all consumed by work and what it demands. Having opportunities to disengage from work*” (S81). Participants described “*work-life balance*” (FG3–2) as an essential form of self-care necessary to maintain their personal wellbeing: “*I think the balance of work time and turning off is important*” (FG3–3). For some educators, maintaining boundaries was problematic within the context of the pandemic, particularly for educators in Victoria, many of whom were required to juggle work, home learning, and parenting responsibilities during lengthy lockdown periods: “*having two children at home while I’m trying to action [work]. . . it’s been quite hard*” (FG2–3) and “*I do feel for the other educators’ families with young children and where children are still doing home schooling*” (FG3–4).

Supportive Relationships

Participants emphasised the importance of both personal and professional relationships as core components of their wellbeing. The importance of supportive relationships was bi-directional: social supports were important to support healthy wellbeing – “*that sense of support*” (FG3–2) – and in return, strong wellbeing supported positive relationships; “*wellbeing allows us to find joy in the relationships we have with ourselves, to children, to colleagues, family and to the land*” (S204). For some educators, the importance of personal relationships with family and friends was highlighted during the pandemic, as they grieved the loss of these essential supports for their wellbeing: “*Because we don’t have contact with our best mates, or our family, it’s fraught*” (FG2–1). Constraints on personal relationships highlighted the importance of supportive professional relationships, with many participants relying more on their colleagues for this form of relational support: “*we have a lot of educators that live on their own . . . they’ve really relied on work more than ever, we are their family*” (FG3–2). For some participants, supportive professional relationships contributed to a sense of solidarity and shared understanding that could not be found elsewhere: “*I think I talk to my family about it, and friends, and they just don’t get it like other people do. So, it’s nice to talk to other people that are going through it, maybe even in different ways*” (FG3–2).

A sense of emotional security derived from supportive collegial relationships was noted as particularly important within the uncertain context of the COVID-19 pandemic, as educators were required to navigate changing professional responsibilities amid fears for their physical health and job security. As noted by participants, wellbeing means “*feeling comfortable to bring up issues surrounding my job and my health and safety*” (S85) and “*feeling supported when things are tough whether at home or work*” (S49). Supportive professional relationships characterised by “*belonging, connection and trust*” (S207) contributed to “*a workplace culture of understanding, respect, (and) open communication*” (S191), which supported educators to be emotionally vulnerable: “*feeling confident to be vulnerable and know that it is accepted and supported in a safe way*” (S52).

Centre directors noted the importance of supporting educator wellbeing during the pandemic, describing this as a professional responsibility: *“without getting educators on board and focusing on their wellbeing... it’ll be like a house of cards and start to fall down quite quickly”* (FG2–2) and *“we have an obligation to ensure that the people who provide our services... have their own wellbeing at the forefront and whatever we can do to support that is vital”* (FG2–1). A strong sense of reciprocal care was evident, with wellbeing described by those in leadership roles as: *“looking after myself and other staff”* (S77) and *“being supported and also supporting others in your team”* (S201). Further, those in leadership roles indicated that the wellbeing of their teams was inextricably linked to their own wellbeing: *“It makes me feel a bit better that I can support the team... that helps my mental welfare”* (FG3–7), and *“When asked the questions (about wellbeing) I actually didn’t instantly think of myself. I actually thought of the educators that I support”* (FG3–5).

Professional Purpose and Contribution

Participants identified the value and importance of their work, demonstrating a strong sense of professional purpose that was tied to their wellbeing: *“We have such an important role in children’s lives we need to be on top of it”* (S5), and *“we are role models to children”* (S33). Strong intrinsic motivations were expressed, with participants underscoring the importance of making a positive contribution to children’s lives: *“feeling you are a valuable worker, making a positive contribution to children and families”* (S11); *“feeling that you feel you are doing something worthwhile”* (S60); and *“being engaged with work that is meaningful”* (S14). The importance of being engaged in fulfilling work was noted in terms of *“professional satisfaction”* (S39) and *“being happy and fulfilled at work”* (S44), as well as in relation to professional autonomy and respect: *“feeling good about yourself, respected”* (S55) and *“being part of decision making”* (S9). For some participants, restricted access to children due to the circumstances of the pandemic challenged this essential component of their wellbeing: *“getting that rewarding feeling, filling our cup... engaging with (children), watching them learning and growing... we’re not really getting that. And so, what is the purpose, and what is our purpose and how do we find that within this kind of environment and constraint?”* (FG2–3).

Participants identified the significant relationship between their own wellbeing and their capacity to make an optimal professional contribution, and hence the importance of maintaining healthy wellbeing: *“in order for a professional to be at full focus of their professional duty... their wellbeing has to be well taken care of”* (FG2–1); *“If I’m not well in my wellbeing I am less of a teacher”* (S10), and *“(wellbeing) is essential to performing job to a high standard”* (S58). More specifically, participants identified the importance of strong educator wellbeing to promote high-quality interactions with children (and thereafter improved outcomes for children): *“without having good educator wellbeing, we cannot be focused and have the*

best of connections with our children" (S13); *"when educators have a strong sense of wellbeing they are better equipped to be responsive to every child"* (S34); and *"positive interactions with children lead to better outcomes, so keeping educators well looked after will no doubt feed back to the children in their care"* (S33).

Professional Recognition and Status

Professional recognition and status emerged as the fifth key theme in how educators define and value wellbeing. Notions of professional status were described in terms of personal recognition and remuneration, as well as wider community acknowledgment of the value of the sector. Participants highlighted a tension between their own beliefs about the importance of their profession and their perceived (lack of) professional status within the community. This incongruity appeared to have a significant impact on their wellbeing; not only was it important for educators to feel that they were making a difference, having this contribution valued and acknowledged by leadership, families, and broader society was also integral to their wellbeing. The importance of *"being acknowledged for the work you do to shape children's lives, not just made to feel like a babysitter"* (S33) was clearly articulated: *"(wellbeing means) feeling respected and valued by not only your team and company but also. . .by the government;"* (S46) and *"professionally, wellbeing's also about being acknowledged in the community"* (FG3–7). The importance of professional recognition extended to receiving appropriate financial remuneration: *"Feeling appreciated for your effort emotionally and financially"* (S4) and *"being paid appropriately for the level of training and effort put in"* (S26) was important to participants' sense of wellbeing. Crucially, participants noted that a perceived lack of professional recognition and status impacted their *"ability to remain passionate about teaching"* (S41) and their ongoing professional commitment; *"If they are not respected and cared for then educators often burn out and don't feel valued"* (S86).

Discussion

The participants in this study articulated definitions of wellbeing that encompass feeling physically, emotionally, and psychologically well and reflect both hedonic and eudaimonic perspectives of wellbeing. Hedonic views of wellbeing were expressed in terms of experiencing health and happiness, while eudaimonic perspectives of wellbeing – which appeared to be more prominent – were conveyed through commentary highlighting the importance of engaging in meaningful work, experiencing a strong sense of purpose, and making a positive contribution to children's lives. Overall, the findings reveal five distinct but overlapping themes that are influenced by personal, relational, and contextual factors. These findings reflect Bronfenbrenner's (1979) ecological systems theory and socioecological

perspectives and provide a compelling case for educator wellbeing to be understood as a holistic concept, as described by Cumming and Wong (2019) and as captured within the ECPW model (McMullen et al., 2020). The impact of the COVID-19 pandemic was evident throughout participants' commentary; however, participants' descriptions of the meaning and importance of wellbeing were aligned with constructs of wellbeing and issues impacting wellbeing that are well established in the literature (Cumming, 2017; Jones et al., 2019). Our data illustrate that the pandemic intensified existing issues and brought the importance of wellbeing into sharper clarity, thus providing a timely opportunity to learn from educators' experiences and develop a richer understanding of the interdependent factors influencing educator wellbeing.

Participants' definitions of wellbeing extended beyond the professional working environment, highlighting the importance of health and happiness in their professional and personal lives. The participants in this study recognised the importance of work-life balance, and the challenges of the pandemic appeared to highlight the importance of setting boundaries and prioritising their own wellbeing. Participants noted the demanding nature of their work, and the importance of practising self-care and having resilience to maintain optimal wellbeing and positive relationships. In some respects, this renewed focus on self-care and achieving optimal work-life balance may provide a promising approach to supporting educator wellbeing. Importantly, some workplace practices that can better meet educators' needs – such as allowing greater flexibility in staffing practices – are modifiable at the service-level and do not necessarily add to operating costs yet have the potential to reap significant rewards in terms of supporting educator wellbeing and workforce retention.

It is true that the work of EC educators is complex and demanding (Jena-Crottet, 2017), and research demonstrates the value of educators practising self-care and setting clear boundaries to support their professional wellbeing (Jennings et al., 2017; Seo & Yuh, 2021; Mansfield et al., 2016). However, supporting educator wellbeing requires both personal and collective approaches, and the use of deliberate strategies that can be maintained within enabling contexts (Cumming & Wong, 2019; Mansfield et al., 2016). As articulated by the participants in this study, collective approaches to supporting wellbeing were sometimes problematic within the context of the pandemic, as working conditions and job stability were largely determined by rapidly changing public responses to the pandemic and government-enforced regulations. Efforts to support educator wellbeing must thus acknowledge the role of the organisational and socio-political context, as well as supporting individuals to assume responsibility for the management of their wellbeing (Greasley & Edwards, 2015).

Participants also underscored the significance of personal and professional relationships as relational supports for educator wellbeing. Positive relationships and healthy wellbeing were described as mutually dependent: strong relationships supported healthy wellbeing, and a strong sense of wellbeing was required to nurture supportive relationships in work and life. Connecting with colleagues through shared experiences was particularly important during the pandemic as many participants experienced reduced access to familiar social networks. Participants reported

that positive collegial relationships fostered a sense of emotional security and contributed to an enhanced sense of team solidarity – a trend that is mirrored in other research undertaken with EC professionals during the pandemic (Eadie et al., 2021; The Front Project, 2020). For those in leadership roles, being able to support the wellbeing of the educators in their teams was assumed as a professional responsibility that was central to their own wellbeing. This is consistent with prior research highlighting the altruistic and empathetic nature of EC educators (Boyd, 2013; Hall-Kenyon et al., 2014). More recently, research undertaken with senior managers in ECE demonstrates that managers are aware of the emotional labour that is inherent in the work of EC educators and are concerned about the need to raise the visibility of these pressures to better support educators' emotional wellbeing (Logan et al., 2020).

Although the importance of professional relationships was perhaps heightened due to the pandemic, it is well supported in existing research undertaken prior to the pandemic (Cumming, 2017; Hall-Kenyon et al., 2014; Jones et al., 2019). Studies show that positive relationships in the workplace can provide a buffer against stress and burnout (Løvgren, 2016; Schreyer & Krause, 2016), contributing to stronger educator wellbeing and overall job satisfaction (Hall-Kenyon et al., 2014; Hur et al., 2016) with direct consequences for the quality of professional practice (Corr et al., 2014; Hur et al., 2016; Jennings et al., 2017) and staff retention (Thorpe et al., 2020). As such, exploring the relational dynamics of educators' work environment and focusing on supports that might facilitate and sustain mutually supportive collegial relationships is an important approach to supporting EC educator wellbeing during acutely challenging times such as the pandemic, as well as on an ongoing basis.

Professional purpose, in terms of performing well and making a valuable contribution, was a primary value expressed by participants demonstrating that the intrinsic motivation of making a meaningful difference to children's lives remains a central tenet of educator wellbeing. This finding provides support for eudaimonic perspectives of educator wellbeing and is consistent with research demonstrating the significant relationship between educators' self-efficacy and psychological wellbeing (Zee & Koomen, 2016); professional autonomy and job satisfaction (Hur et al., 2016; Irvine et al., 2016); and intellectual engagement and professional wellbeing (Løvgren, 2016). As articulated by the participants in this study, educators' core purpose in their work with children is such an integral component of their wellbeing that when their capacity to perform this work is compromised – such as through restricted access to children during the pandemic – the impact on their wellbeing is significant. This is consistent with prior research showing that educators' interactions with children provide their greatest source of job satisfaction (Hall-Kenyon et al., 2014). As such, supporting educator wellbeing means ensuring that educators are given opportunities to develop nurturing relationships with children, to practise a level of autonomy that enables them to use their knowledge and skills at an appropriately challenging level, and to engage in meaningful work that aligns with their values and motivations.

Participants recognised that their wellbeing and capacity to make a worthy contribution was also influenced by external factors including their professional standing and financial remuneration. While educators recognised the importance of

their work supporting children and families – particularly during the pandemic when they continued to provide an essential service – they perceived that many in the community continued to view them simply as “babysitters”. The tension between participants’ self-perception and their professional status may have been heightened during the pandemic, however, this issue has been well documented previously (Boyd, 2013; Faulkner et al., 2016; King et al., 2016). Studies have shown that a lack of professional recognition and status contributes to educators’ likelihood of leaving the profession (Irvine et al., 2016), with EC educators who entered the profession based on strong intrinsic motivations – such as wanting to make a positive difference to the lives of children – more likely to leave the sector (Thorpe et al., 2020). Recognising and valuing the important work of EC educators through raising the visibility of their work in the community, promoting their professional status, and providing appropriate financial remuneration is critical to supporting educator wellbeing and the ongoing engagement of committed educators in the sector.

Implications for Policy in Early Childhood Education

Throughout the discussion above we have aimed to show how our findings have direct implications for practice, as some issues affecting educator wellbeing can be addressed at the local level, for example, through flexible working conditions that allow educators to achieve a desirable work-life balance. The policy implications of our research include: highlighting the importance of educator wellbeing as a contributor to program quality within key policy documents; facilitating educators’ access to resources that empower them to care for their physical and mental wellbeing; supporting initiatives that encourage strong professional relationships, including opportunities for mentoring and collaborative professional communities; supporting all educators to take part in ongoing professional learning and upgrading of qualifications; and lifting the status of the profession by acknowledging the valuable contribution EC educators make to the lives of children and families. Remuneration is an obvious but challenging method to achieve this, but efforts can also be invested in lower-cost public messaging; for example, by increasing the visibility of educator’s work, by naming ECE educators as “essential” workers, and by highlighting the “education” narrative as well as the “care” narrative in public discourse. In the context of a global pandemic, the value of EC educators in supporting children and families has never been more apparent, as are the benefits across multiple domains and for numerous stakeholders when educators are supported to thrive.

Strengths and Limitations

Limitations to this study exist primarily around the lack of variability in the location of the participants. Most participants were located in metropolitan Victoria (70.8%),

for whom the influence of the COVID-19 pandemic may have been more dominant than educators located in other areas of Australia, where lockdowns were less common during 2020. However, issues raised by participants in this study are supported by prior research and public discourse, suggesting that participants' perspectives represent ongoing issues and tensions that affect educator wellbeing across the sector (see Cumming, 2017; Irvine et al., 2016). A strength of the research is the engagement of educators with varied characteristics, such as roles and levels of experience. Further, the use of mixed methods (online survey complemented by focus groups) ensured a rich and nuanced data set that accounted for a broad range of educator experiences.

Recommendations for Future Research

Future research should focus on the interdependence of factors influencing educators' holistic wellbeing: having established what matters to educators, identifying the dynamics between these five themes – and how interventions in one aspect may positively influence another – could provide a promising approach to supporting educator wellbeing. In addition, studies should aim to understand more fully how eudaimonic dimensions of wellbeing – such as educator's sense of purpose and contribution to others – can best be developed and supported. Given that educator wellbeing should be a shared responsibility, future research might also explore how educators' holistic wellbeing can be supported from leadership and organisational perspectives. Future research or modelling needs to account for the complex local and national parameters of funding, governance and curricula, as well as broader cultural attitudes towards the value of early childhood education.

Appendix: Open-Ended Survey and Focus Groups Questions

Online survey questions about educator wellbeing

Q. What does educator wellbeing mean to you?

Q. Why do you think educator wellbeing is important?

Q. Do you have any other comments to add about your experiences during the pandemic?

Focus group discussion prompts

Q. Can you please describe what educator wellbeing means to you?

Q. How does your wellbeing impact on your relationships with children, families and co-workers?

Q. If you have any other general comments or feedback about your experiences or wellbeing during this time, please feel free to share them now.

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Chapter 8

Work Well-Being During COVID-19: A Survey of Canadian Early Childhood Education and Care Managers



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Since March 2020, the threat posed by the SARS-CoV-2 (COVID-19) coronavirus impacted many institutions, including early childhood education and care (ECEC) settings. Similar to many others around the world, the managers of ECEC services in Quebec (Canada) had to adapt their service offer and reorganize the entire childcare service in order to comply with sanitary measures and thus protect educational staff, children, and parents (Association Québécoise des centres de la petite enfance [AQCPPE], 2020a; Gouvernement du Québec [GQ], 2021b). During the first 12 months of the pandemic (from March 2020 to March 2021), the managers of the ECECs were forced to revise the operation of their establishments on numerous occasions in order to adapt to the sanitary measures of Quebec's public health authorities, and thus to deal with the second and third waves of the COVID-19. These reorganizations profoundly transformed the management of space, equipment, personnel, and schedules and had significant repercussions on the way children were cared for and on ECEC's relations with parents (AQCPPE, 2020b). All of this has resulted in an increased workload and financial burden for management staff, who are now anticipating annual deficits.

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These successive changes, attributable to public health regulations that have continued to evolve in step with the state of knowledge about COVID-19, have led to a significant increase in the level of stress and a decrease in the level of well-being among the managers of these educational institutions in March 2020 (Bigras & Lemay, 2020; Swigonski et al., 2021). Moreover, many members of the educational staff of ECECs, including managers and educators, say they are exhausted and many are seriously considering leaving the profession or have already done so (Bassok et al., 2021; Schué, 2020). A labor shortage among managers in this critical sector will have dramatic consequences for the entire population, whose members depend on ECEC for their work–family balance (Bassok et al., 2021). Knowing that a pandemic causes a state of stress (Crawford et al., 2021; Swigonski et al., 2021) that lasts and can become chronic (Centre d'études sur le stress humain [CESH], 2019), it is legitimate to be concerned about the indicators of managers' well-being at work. However, few studies have looked at this in times of a pandemic, and even fewer about the means to be taken to support it. Thus, this study aims to evaluate the level of well-being at work of early childhood education and care (ECEC) managers during winter 2021 in the COVID-19 pandemic crisis.

Background

The background starts with a literature review stressing the relevance of ECEC managers' well-being, based on their job description, knowledge on work-related well-being, followed by consideration about the pandemic's effects on managers in ECEC settings. Then, it continues with the Job Demands and Resources model (JD-R), Bakker & Demerouti, 2014), the theoretical model on which this study is based.

Managers' Well-Being

Managers are central to the organization of ECEC settings and the quality of services provided to children and families (Organisation for Economic Co-operation and Development [OECD], 2020; Ryan & Whitebook, 2012). In Quebec, two types of ECEC jobs involve management tasks: general managers and assistant managers. General managers are responsible for all aspects of planning, organizing, directing, and controlling activities, both in terms of assisting the board of directors of the childcare service in making decisions and in ensuring the optimal operation of educational services, as well as the efficient use of the childcare service's financial, human, material, real estate, and information resources. To do this, the general managers are supported by the assistant managers, who contribute to the management of administrative affairs. In addition to providing support to the general managers, the assistant managers are more specifically responsible for managing

the offer of educational services, pedagogical services, the facility's human resources, as well as relations with the facility's parent users in order to promote the overall development of children (Ministère de la famille [MFA], 2020a; Association des cadres de centre de la petite enfance du Québec, 2021). In summary, these managers are responsible for overseeing the educational programs and services offered to children, establishing collaborative relationships with families, coaching employees on the quality of services offered, supporting the quality of the professional climate, as well as respecting the budgetary rules associated with the funding provided by the government (OECD, 2020; Ryan & Whitebook, 2012; Strehmel et al., 2019). Yet, their ability to perform all of these functions and provide quality educational services would be closely related to their perceived level of job stress, burnout, self-compassion, and depressive symptoms. On this basis, their well-being at work, therefore, merits further study (Corr et al., 2017; Elomaa et al., 2020; Kristiansen et al., 2021; Strehmel et al., 2019), even more so in the context of a pandemic that is bringing its share of transformations in the ECEC services (Bassok et al., 2020, 2021).

Although several definitions of work well-being exist, they generally refer to the following concepts: work engagement, job satisfaction, environmental control, co-worker relationships and support, autonomy, fulfillment and potential development, and physical and mental health (Cumming, 2017; Cumming & Wong, 2019; Hall-Kenyon et al., 2014; Voci et al., 2019). In other words, well-being at work would refer to several components of the work environment, which translates into feeling good physically and mentally. The literature points out that several variables are indicators of well-being at work, specifically the level of work-related stress, manifestations of burnout, and depressive symptoms, which would be negative indicators of well-being (Cumming & Wong, 2019; Rothmann, 2008). Conversely, components of self-compassion (e.g., accepting a felt emotion, even when it's negative) would be a positive indicator of well-being at work (Zessin et al., 2015). The literature review will thus focus on these four indicators of job well-being.

Work-Related Stress

According to Leka et al. (2004), work-related stress is defined as a set of reactions on the part of the employee in the presence of a mismatch between the demands and pressures placed on him or her and his or her resources, abilities, and knowledge. This mismatch challenges the employees' ability to cope and could damage their physical (e.g., musculoskeletal problems and cardiovascular disease) and mental (e.g., burnout and depression) health (Curbow et al., 2000; Roberts et al., 2019) and adversely affect their family or social life (Burman & Goswami, 2018), which can impact business performance. Stress is, for these reasons, often used as an indicator of low workplace well-being in early childhood (Jones et al., 2019).

Burnout

Burnout is defined as a psychological state of emotional and mental exhaustion, depersonalization, or cynicism, leading to indifference or aloofness about work, as well as professional inefficiency, resulting from a negative evaluation of professional performance and low self-esteem (Maslach et al., 1997, 2001; Schaufeli et al., 2006). According to Schaufeli et al. (2008), burnout negatively affects well-being at work, which also makes it an indicator of low well-being at work.

Self-Compassion

Neff (2003a) defines self-compassion as an adaptive process for enhancing resilience and well-being at work. This notion is characterized by the presence of self-compassion (being kind and understanding rather than critical or harsh), common humanity (seeing one's experience as part of the common human experience rather than isolating it), and mindfulness (being present and attentive to one's experience in the present moment; Neff, 2003b). This researcher adds that self-compassion is negatively related to anxiety and depression, and positively related to satisfaction. The Quebec Order of Psychologists (QOP, 2020) suggests that self-compassion and indulgence toward oneself and others during the pandemic period can enhance well-being and promote mental health.

Depressive Symptoms

For Roberts et al. (2019), one important indicator of educators' well-being documented in the literature is depressive symptomatology. Depressive symptoms include feelings of hopelessness, irritability, lower energy, and difficulty concentrating (American Psychiatric Association, 2013). A review of the literature indicates that 6–27% of early childhood educators would exhibit depressive symptoms (Corr et al., 2014). More recently, Roberts et al. (2019) reported that 8.9% of educators in ECEC had clinically significant depression (i.e., scores above 10: 8.0% home-based, 10.7% center-based, 9.6% Pre-K, and 7.9% of K-3 teachers; Roberts et al., 2019). Faulkner et al. (2016) note that the presence of stressors in the workplace would promote the development of depressive symptoms (Kwon et al., 2021; Roberts et al., 2019). Whitaker et al. (2015) add that the presence of an imbalance between job demands, sense of control over those demands, and the level of support available would be associated with increased depressive symptoms, indicating a low well-being at work.

Pandemic Effects on Managers in ECEC Settings

Very little has been written about managers' well-being at work, including their levels of stress, burnout, self-compassion, and depressive symptoms that may be affected by the demands of the COVID-19 pandemic. However, according to a study of Canadian ECEC providers (Friendly et al., 2020), the pandemic is negatively affecting Canadian childcare centers in a number of ways. For example, 68% of managers surveyed reported that ECEC settings had experienced a deterioration in their financial situation since the beginning of the pandemic, and 93% of them expressed concern about the reopening of their ECECs, particularly in relation to the costs of health and safety measures, a drop in attendance, and a shortage of staff (Friendly et al., 2020). These concerns are likely to increase the level of stress felt by managers, which may affect their level of well-being at work. Another study conducted in Quebec in the spring of 2020 suggests that 53% of educational staff in ECEC settings experienced a deterioration in their level of well-being at work, and 42.2% experienced an increase in their level of stress during the implementation of emergency childcare services (Bigras et al., 2021b). Similar negative effects of COVID-19 on ECEC educators' well-being have been observed internationally (e.g., Eadie et al., 2021; Kim et al., 2021; Swigonski et al., 2021). In sum, the pandemic, due to many new demands that require transformation, is likely to increase the level of work-related stress, in addition to contributing to burnout, decreased self-compassion, and increased depressive symptoms, even beyond the pandemic. Examining the ability of ECEC managers to respond would therefore inform us about their level of well-being at work.

Theoretical Model of Work

Our study is based on the Job Demands and Resources model ([JD-R] by Bakker and Demerouti, 2014), which involves, on the one hand, taking into account the demands of the workplace, that is, the physical and psychological efforts and costs to be provided by the employee. These work demands, when too high, are generally associated with a decrease in the level of employee health that can lead to burnout or negative affect (Bakker & Demerouti, 2014). On the other hand, this model involves considering resources that enable the achievement of professional goals, reduce the consequences of work demands, and allow for growth and learning. These resources, often work-related in nature, are associated with increased employee engagement and satisfaction (Bakker & Demerouti, 2014). Thus, work resources mitigate the negative consequences of work demands on well-being and work engagement (Skaalvik & Skaalvik, 2018). Applied to managers of ECEC settings in the pandemic context, this model captures how the new demands of their work (e.g., work overload caused by health enforcement, changes in facility operations, low perceived government support, low control over public

health-imposed rules related to outbreak situations) involve greater physical and mental effort. At the same time, the pandemic context diminishes the professional resources available, as managers have difficulty meeting the objectives associated with their duties (e.g., unbalanced budgets, staff shortages, quality of services affected: instability, group closures, parent dissatisfaction). In this perspective, due to reduced resources, the consequences of work demands cannot be mitigated. Finally, the pandemic context seems to provide little opportunity for managers to reflect on how their institution operates to ensure quality, or to give meaning to their work, given the sense of urgency and danger associated with it. The JD-R model will therefore be used as a framework for interpreting the results of this study in order to understand the combined effect of job demands and low resources on managers' levels of work-related stress, burnout, self-compassion, and depressive symptoms in the pandemic context.

To our knowledge, very few studies are underway to document the consequences of the pandemic context on ECEC managers, given the novelty of this issue. In addition, few studies have focused on the well-being of managers in general, particularly in ECEC settings, although their role is crucial in supporting the support offered to their educational staff and the quality of the services provided (Douglass, 2019; Ryan & Whitebook, 2012).

Objectives

The general objective of this research is to evaluate ECECs managers' indicators of well-being at work in the context of the COVID-19 pandemic. The specific objective was to evaluate ECEC managers' level of well-being at work between February and March 2021, almost one year after the onset of the pandemic. The aspects of ECEC managers' well-being considered in this study included stress levels, burnout symptoms, self-compassion, and depressive symptoms. These data will provide a portrait of the level of well-being of ECEC managers, one year after the first wave of the pandemic across Quebec (Canada) and around the world.

Methodology

This section will provide a description of the study's design, sampling procedure, sample and setting, data collection procedure, instruments used in the study, and data analysis procedure.

Design

The research design of the current study is descriptive and correlational in nature. The quantitative data were collected as part of a larger longitudinal and quasi-experimental research that aimed to examine the effects of an intervention designed to support ECEC managers through the pandemic as compared with a control group that did not receive the intervention. The data reported in this chapter are those from the control group and provide a portrait of the well-being of ECEC managers in Quebec one year after the beginning of the pandemic.

Sampling Procedure

The recruitment of participants for a convenience sampling was carried out between February 17 and March 31, 2021, by sending an email to all ECEC managers in Quebec (Canada) with a description of the study and a link leading to an online questionnaire on a software called *LimeSurvey* on which the questionnaire was located. In Quebec (Canada), based on the list of the ECEC available on the government website, it was estimated that there were 1145 assistant managers and 950 general managers. Of these, 999 assistant managers and 918 general managers were contacted. Email reminders, once for each potential respondent, were sent out over the course of a month. Before completing the online questionnaire, all managers were informed about the project and standard ethical considerations and signed a consent form if they still wanted to participate. Ethical approval was obtained by the principal investigator from the University of Quebec at Montreal's (UQAM's) Ethics and Human Research Committee prior to participant recruitment.

Sample and Setting

The convenience sample consisted of 328 ECEC managers (116 general managers and 212 assistant managers) distributed (not randomly) in the 17 administrative regions of Quebec (Canada). In general, respondents (97.5% women) were aged between 25 and 64 years, with more than four-fifths (78.3%) between 40 and 59 years. Regarding the years of service accumulated as a manager in their current childcare service, almost half of the participants (41.5%) indicated having 10 years or less of work experience, almost one-quarter of participants had accumulated 11–20 years of experience (24.4%), while 27.7% had over 20 years of service.

In terms of managers' higher level of qualification, a majority of managers had a university degree (85.1%), which corresponds to the university-level training requirements of the Quebec government for child care managers. No difference

was found between general managers and assistant managers on those descriptive variables, so the analyses were conducted on the sample of managers as a whole.

Data Collection Procedure

Quantitative data were collected via an online questionnaire including four different valid scales on Perceived stress, Burnout symptoms, Self-compassion, and Depressive symptoms as indicators of well-being at work and sociodemographic characteristics. Those characteristics were gathered with a set of nine descriptive questions about the respondent, including sex, age, regional area, higher level of diplomas, cumulated experience as manager, type of ECEC, living with a chronic health problem, living with a loved one over 70 years of age or with a chronic health problem, and having a dependent child under the age of 18 at home.

Instruments

The following instruments were used to collect data for the study.

Stress

Stress was measured with the *Perceived Stress Scale Questionnaire* (Cohen et al., 1983; Quintard, 1994), which is composed of 14 items and is rated using a 5-point Likert-type response scale (from 0 = Never to 4 = Very often). The total score represents the sum of the items and ranges from 0 to 56, with a higher score meaning a higher level of perceived stress. The total score is categorized in three levels: low stress (scores from 0 to 18), moderate stress (19 to 37), and high stress (38 to 56; Cohen et al., 1983). This measure has a good internal consistency (from 0.84 to 0.86; Cohen et al., 1983), as well as a good criterion (concurrent and predictive), construct (convergent and discriminant), and content (concurrent) validity (Cohen et al., 1983; Langevin et al., 2015; Quintard, 1994). The Cronbach's alpha is 0.90, suggesting that the items have a good internal consistency.

Burnout Symptoms

Burnout symptoms were measured using the French version of the *Maslach Burnout Inventory* (Dion & Tessier, 1994; Maslach et al., 1996). The rating of the 22 items on a 4-point Likert scale (1 = strongly agree to 4 = strongly disagree) gives scores on three subscales (Emotional exhaustion = 9 items, alpha of 0.90; Depersonalization = 5 items, alpha of 0.64; and Self-actualization = 8 items reversed, alpha of

0.74; Dion & Tessier, 1994). The sum of the scores on the 22 items gives the total score ranging from 22 to 88, with a high score signifying a high level of burnout symptoms. To conduct the analyses, the sum of the items on the Emotional exhaustion subscale was then categorized into three levels (0–17 = low; 18–29 = moderate; 30 and above = high; Maslach et al., 2006), the Depersonalization subscale was categorized into three levels (0–5 = low; 6–11 = moderate; 12 and above = high; Maslach et al., 2006), and the Personal accomplishment subscale in three levels (0–33 = low; 34–39 = moderate; 40 and more = high; Maslach et al., 2006). The authors of the instrument report adequate construct (convergent) and criterion (concurrent) validity (Dion & Tessier, 1994; Maslach et al., 1996). The Cronbach's alpha is 0.88, suggesting that the items have a good internal consistency.

Self-Compassion

The Self-compassion Scale (Kotsou & Leys, 2016; Neff, 2003a; Tóth-Király & Neff, 2020) is made of 26 items that assess self-compassion in six sub-dimensions: (1) Self-kindness (e.g., “I try to be understanding and patient towards aspects of my personality I don't like”), (2) reduced Self-judgment (e.g., “I'm disapproving and judgmental about my own flaws and inadequacies”), (3) Common humanity (e.g., “I try to see my failings as part of the human condition”), (4) reduced Isolation (e.g., “When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world”), (5) Mindfulness (e.g., “When something painful happens I try to take a balanced view of the situation”), and (6) reduced Over-identification (e.g., “When I'm feeling down I tend to obsess and fixate on everything that's wrong”). A 5-point Likert-scale (1 = almost never to 5 = almost always) was used for the 13 items about the sub-dimensions of self-judgment, isolation, and over-identification, which were reverse coded. Self-compassion scale score is generated by the average of the items. Each of the subscales is then categorized into three levels (1–2.5 = low, 2.5–3.5 moderate, and 3.5–5 = high; Neff, 2003a). The internal consistency of the total score is 0.94 and ranges from 0.74 to 0.89 for the sub-dimensions (Kotsou & Leys, 2016), while the authors report good construct, convergent, and content validity (Kotsou & Leys, 2016; Neff, 2003a). The Cronbach's alpha is 0.93, suggesting that the items have a good internal consistency.

Depressive Symptoms

Depressive symptoms were measured using the *Center for Epidemiologic Studies-Depression Scale* ([CESD], Fuhrer & Rouillon, 1989; Radloff, 1977), composed of 10 items rated on a 4-point Likert-type scale frequency (from 0 = never, very rarely/less than 1 day; to 3 = frequently, all the time/5–7 days). Items 5 and 8 were reversed coded. A total score above 16 indicates depressive symptoms at a clinical level. This measure has good internal consistency of 0.85 (Radloff, 1977), construct (convergent and discriminant), criteria (concurrent), and content validity (Langevin et al.,

2011; Radloff, 1977; Seppälä et al., 2009). The Cronbach's alpha is 0.89, suggesting that the items have a good internal consistency.

Data Analysis

With IBM[®] SPSS software (26th version), descriptive analyses were conducted, gathering measures of frequency and central tendency for each variable (perceived stress, burnout, self-compassion, and depressive symptoms) and subscales.

Results

This section presents the study's findings. These findings address the research questions of the study.

Perceived Stress

Table 8.1 presents the levels of perceived stress among ECEC managers. Results indicated that 21.3% of the 328 managers reported a low level of stress, while 71.6% reported an average level of stress and 7% reported a high level of stress (score above 38).

Burnout Symptoms

On the levels of the burnout scales among ECEC managers, Table 8.2 shows among all the respondent managers, 39.6% reported low levels of Emotional exhaustion, 31.4% an average level, and 29% high levels. For the Depersonalization subscale, 54.9% said they were at the low level, 32.9% at the medium level, and 12.2% at the high level. Nevertheless, we noted that 100% of respondents reported a low level of Accomplishment at work subscale.

Table 8.1 Means and levels of perceived stress among ECEC managers

	ECEC managers	
	<i>N</i>	%
Perceived stress		
Low	70	21.3
Average	235	71.6
High	23	7

Table 8.2 Means and levels of burnout subscales among ECEC managers

	ECEC managers	
	<i>n</i>	%
Emotional exhaustion		
Low	130	39.6
Average	103	31.4
High	95	29
Depersonalization		
Low	180	54.9
Average	108	32.9
High	40	12.2
Accomplishment at work		
Low	328	100
Average	0	0
High	0	0

Self-Compassion

The self-compassion scale and levels of the six self-compassion sub-dimensions among ECEC managers are presented in Table 8.3.

Distribution of responses for managers on both the overall Self-compassion scale and each of the six subscales showed that more than two-thirds of the respondents (40.2%) reported a high level of Self-compassion, while half (51.5%) are at the average level and less than one in ten (8.2%) reports a low level of Self-compassion. On the Self-kindness scale, 14.3% of managers indicated a low level, almost half (45.7%) an average level, and four out of ten a high level (40.2%). More managers (40.9%) point out an average level of Self-judgment, while one-third mentioned both a low level (29.3%) and a high level (29.9%) on this subscale. On the Common humanity subscale, a little more than half of the respondents (54.9%) reported an average level on this scale, while 12.2% reported a low level and 32.9% a high level. For the Isolation scale, a different distribution from the other subscales was observed; in fact, more than a half (52.1%) of the managers mentioned a high level and 40% an average level of Isolation, while fewer than one in ten pointed out a low level of Isolation. Then, on the Mindfulness subscale, the respondents were equally distributed between an average and a high level, while only 3.4% indicated a low level. At least, for the Over-identification subscale, almost half of the managers mentioned an average level (47%), while more than a third reported a high level (34.5%) and only 18.6% point out a low level.

Depressive Symptoms

Table 8.4 indicates that more than eight out of ten respondents reported low levels of depressive symptoms and that 12.8% of them were at a high level.

Table 8.3 Means and levels of self-compassion scale and subscale among ECEC managers

	ECEC managers	
	<i>n</i>	%
Self-compassion		
Low	27	8.2
Average	169	51.5
High	132	40.2
Self-kindness		
Low	47	14.3
Average	150	45.7
High	131	39.9
Self-judgment		
Low	96	29.3
Average	134	40.9
High	98	29.9
Common humanity		
Low	40	12.2
Average	180	54.9
High	108	32.9
Isolation		
Low	27	8.2
Average	130	39.6
High	171	52.1
Mindfulness		
Low	11	3.4
Average	158	48.2
High	159	48.5
Over-identification		
Low	61	18.6
Average	154	47.0
High	113	34.5

Table 8.4 Means and levels of depressive symptoms among ECEC managers

	All managers	
	<i>n</i>	%
Depressive symptoms		
Low	286	87.2
High	42	12.8

Discussion

Since March 2020, a year has passed during which Quebec's (Canada) ECEC managers experienced many continuous challenges and had to adapt daily to the health crisis. The data from this study suggest some impact on indices of well-being at work, both in terms of perceived stress at work, accomplishment at work on

burnout scale, and isolation and over-identification on the self-compassion scale in their ECEC work environment. The results regarding perceived stress levels at work suggested that almost 80% reported stress levels to be average or high, while the Institut national de la santé publique du Québec (INSPQ) results collected in the same period reported between 16% and 17% of psychological distress, 18% reported a fair to poor level of mental health, and 16% moderate to severe anxiety symptoms (INSPQ, 2021). These results are alarming, but not surprising, given the situation. Another study also reported that managers were 50% more likely to report negative incidence of the pandemic context on their mental health than the general population in the same period (Morneau Shepell, 2021). The results will be discussed using the theoretical framework to compare managers’ job demands and resources, which will help explain their emotional state.

Work-Related Demands

As the theoretical model of JD-R implies, well-being at work depends on work-related demands (Bakker & Demerouti, 2014), such as a lot of tasks and responsibilities that managers usually must deal with (see Fig. 8.1).

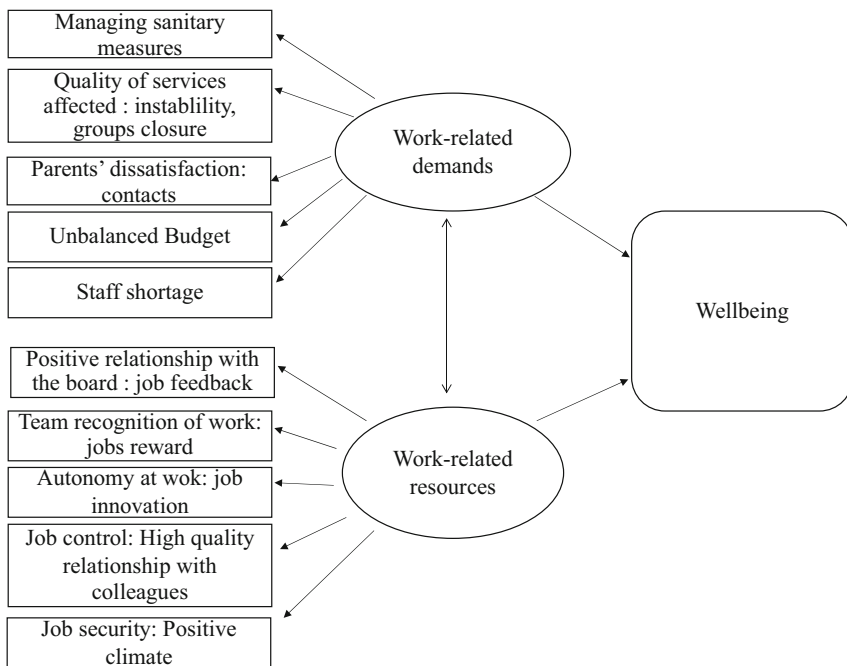


Fig. 8.1 The Job Demands and Resources model for early childhood managers in pandemic

Between March 2020 and March 2021, because of the COVID-19 pandemic context, managers faced numerous additional challenges that can explain that more than four to five reported average or high levels of perceived stress at work, that all the managers reported low levels of accomplishment at work on the burnout scale, and high levels of isolation and over-identification on the self-compassion scale. The most likely hypothesis is that the work overload related to the pandemic context would affect all components of the managers' task, which would explain the variable on well-being results.

Regarding the work overload issue, it should be noted that in terms of planning, organization, management, and control of activities, many tasks designated by public health to enforce the application of health measures have been added to the work of managers (GQ, 2021b). This is the case, for example, of exclusion measures. Indeed, when a child presents symptoms associated with COVID-19, managers must ensure that the child be removed from the group and contact the parents in order to remove the child from the facility as soon as possible. The parents must then keep their child at home for at least 24 h and have him tested. If there are still symptoms, the entire family will be isolated (GQ, 2021a). This exclusionary measure has led to increasingly negative reactions from some parents who must then take time off work to keep their children at home. Such incidences have happened several times since the beginning of the pandemic. The pressure is even greater when educators are involved. Because of the difficulties in finding replacements for affected teachers, some programs and classrooms have been completely closed for this reason. Also, at times during the first 12 months of the pandemic (March 2020 to March 2021), health measures prohibited parents from entering ECEC settings. Managers were then required to ensure that they controlled entry to the setting and drove the children to their classroom themselves. This measure was modified by public health in a more or less restrictive way according to the different waves of the pandemic. Finally, another health rule was to keep children in restricted group bubbles throughout the day, so that they wouldn't mix with other groups and couldn't contaminate them in the event of an outbreak in their group (GQ, 2021b).

In terms of effective management of material resources, managers were also responsible for the delivery of personal protective equipment (e.g., PPE: procedure masks, goggles, and visors) and their distribution within their facilities, as well as ensuring that ECEC staff were wearing those PPE and following protocols for disinfecting premises and objects. In addition, when the government discovered that the masks they provided to the ECEC services did not meet public health standards, managers were forced to withdraw malfunctioning masks from their installations as a matter of urgency on December 24, 2020 (Sioui & Goudreault, 2021).

The pandemic also affected human resource management, that is, the availability, attractiveness, and retention of educational staff (Bassok et al., 2021; Eadie et al., 2021). First, when educators were in contact with people who were symptomatic or tested positive, they too had to be quarantined at home. Then, educators were also exhausted (Bassok et al., 2021; Bigras et al., 2021b; Eadie et al., 2021) and left in large numbers, either for long-term sick leave or to enter a new profession (Schué,

2020). These challenging conditions exacerbated the shortage of trained educators and made the recruitment of qualified individuals even more complex. In December 2020, 2–3 months before this study, the labor shortage problem was starting to emerge more and more in the news (Leduc, 2020), leading to problems of accessibility of childcare for children and their parents when classrooms had to be closed due to lack of labor.

Finally, all the measures imposed by the pandemic context also affected the financial management of the daycare service. Indeed, significant costs were associated with the hiring of additional staff dedicated to welcoming parents, disinfecting surfaces and equipment, and respecting children's group bubbles. Moreover, the 2020–2021, MF budget rules weren't sent to ECEC settings until November 5, 2020 (MFA, 2020b), more than 6 months after the beginning of the fiscal year (starting April 1), causing budget planning difficulties and additional stress for managers.

In short, these numerous adaptations related to the pandemic had a major effect on all components of the managers' role, including decision-making, human and material resource management, and sound financial management. The time devoted to applying these numerous health rules reduced the time managers had available for their regular tasks such as educational leadership, coaching their work team, and monitoring quality. All of the above may explain the average and higher proportion of stress reported by managers, their low level of sense of accomplishment, as well as the high level of feeling separated or cut off from the rest of the world when they think about their difficulties. It's plausible that this increased sense of isolation of managers can also be explained by the high load of demands related to the pandemic context, which we have discussed at length before.

In the same sense, the high proportion of managers who present a high level of over-identification on the self-compassion scale, could also be the result of the (too) many demands that managers accumulate, thus making them pay a lot of attention to the suffering and difficulties that these demands generate. Emotional and physical depletion and fatigue that occur when helpers engage in emotional labor and are unable to replenish, called compassion fatigue, could also emerge (Figley, 2002, cited by Lemoine et al., 2020). This sense of fatigue or exhaustion may overtake a person and cause a decline in their ability to experience joy or to feel and care for others. Signs of compassion fatigue include physical symptoms (e.g., sleeping, fatigue, and eating issues; headaches, stomach issues, back pain, muscle pain, heart palpitations, increased blood pressure), behavioral symptoms (trouble focusing, irritability, angry outbursts, crying, forgetfulness, numbing, over- or under-eating, abusing substances), and emotional/psychological symptoms (feeling excessively worried, angry, sad/depressed, cynical, worthless, helpless or like an imposter, and also experiencing problems in relationships; Figley, 2002, cited by Lemoine et al., 2020). In short, these symptoms affect the well-being of the people concerned (here, the managers) and can undoubtedly lead to over-identification of difficulties.

Work-Related Resources

According to the JD-R model, the presence of professional resources is associated with increased engagement and satisfaction at work (Bakker & Demerouti, 2014). In this sense, this study highlights that the results related to certain indices of well-being of ECECs managers' responses were more positive. In addition, low proportions of high levels of Emotional exhaustion and Depersonalization and high levels of Self-kindness and Common humanity were observed. Conversely, there were low proportions of Self-judgment and Depressive symptoms at a clinical level. In addition, very few managers reported high levels of perceived stress.

Looking at these results, it's possible that the high level of self-compassion demonstrated by managers may be related to certain professional resources that can compensate for the high demands of the work environment. Indeed, the literature points out that social support, opportunities for peer contact, positive organizational climate, high-quality relationships with colleagues, professional autonomy, opportunities for innovation, feedback on work, and superior appreciation and support are favorable resources of the work environment of managers in ECEC settings (Bakker & Demerouti, 2014). A few studies conducted in pandemic settings raise hypotheses about this.

In a study conducted by Bigras et al. (2021a) with 42 daycare managers, several managers noted that the positive support offered by the parents on their board of directors enabled them to continue to face the challenges generated by the pandemic context and its day-to-day management. This type of support involves a form of social support, positive feedback from their supervisor, and suggests a positive organizational climate. Other managers have also highlighted the recognition of parents as a positive resource (Bigras et al., 2021a). In another study conducted with ECEC setting staff, Bigras et al. (2021b) highlighted the many tasks that were being performed for the first time in telework in the context of the pandemic and, in parallel, the sense of usefulness felt by the staff that could explain their higher level of reported well-being. Thus, the pandemic context and its many challenges could allow managers to be innovative in finding solutions to adapt to daily challenges, constituting another form of resource. Finally, it should be noted that managers who maintain high-quality relationships with both their team could also have emotional resources that can compensate for the increased demands of the context (Dicke et al., 2017).

In the present study, however, managers weren't directly questioned about their perceptions of the resources available in their work environment. Thus, future studies could be conducted to confirm the protective effects of work resources on the well-being and emotional state of managers in ECEC settings.

Nevertheless, given the emotional state of ECEC managers one year after the start of the pandemic, it seems urgent to try to put measures in place to prevent the deterioration of their well-being at work that could affect their long-term mental health. For example, Dicke et al. (2017) suggest that regular meetings between peers provide a level of social support that reduces feelings of isolation, stress, and low

achievement, and increases the level of general well-being. Furthermore, when these peer meetings specifically address stress management and ways to develop self-compassion (Kotera & Van Gordon, 2021) in a difficult context, such as a pandemic, it's possible to contribute to the well-being of participants (Bigras et al., 2021a; Nguyen & Le, 2021).

Strengths and Limitations of the Study

This study has several strengths, but some limitations as well. First, the results provide a first picture of the emotional state of ECEC managers after a year of the pandemic. To our knowledge, such knowledge was not available for this particular population of ECEC managers, who are still very little discussed in the literature. This study also offers some propositions regarding interventions that are needed to support the well-being of these managers.

Regarding the limitation, we first cannot claim the representativeness of our sample to all Quebec managers, based on the proportions of each of the 17 administrative regions of Quebec (Canada). Moreover, this study concerns the perception of well-being of managers of not-for-profit ECEC services in Quebec. Therefore, the results presented in this chapter don't illustrate the perceived well-being of subsidized and unsubsidized private childcare managers, who weren't included in the survey. However, the survey allowed for data collection almost one year after starting of the pandemic and provides a certain "base level" about the manager's emotional state. To follow up, it may be appropriate to replicate this study at a later time measuring the long-time impact of the pandemic on the early childhood managers' emotional states.

Conclusion

In conclusion, the results of the study emphasize matters to be enhanced and solutions to explore. These findings are particularly relevant for ECEC services or settings in other parts of the world. ECEC managers are at the heart of their organization and are responsible for the quality of services offered to children and families during a health crisis. Moreover, public health directors, policymakers, and childcare networks will be able to draw on this study's implications to support and improve early childhood managers' emotional state at work. In fact, although the situation is improving and most industrialized countries are moving toward gradual deconfinement following the administration of vaccines, the situation is still far from being back to normal in ECEC settings. Managers will still feel the collateral effects of this pandemic for a long time to come, particularly in terms of staff shortages. This pressure to adapt is likely to have long-term negative effects on the well-being of ECEC managers. There is an urgent need for further research that monitors those

aspects in order to put forward strategies that promote managers' well-being and mental health.

Nevertheless, this study points to positive results concerning managers' well-being at work as well as resources that could theoretically compensate for the demands of the pandemic context. For example, self-compassion to prevent burnout would be an avenue to explore to foster managerial resilience. As Bigras et al. (2021a) note, well-being at work also depends on the existence of healing and support activities tailored to individual needs during a pandemic context.

Ultimately, this pandemic context acts as an accelerator of the challenges that were already present for ECEC managers around the world. Excellent ECEC managers enhance the quality of their environment through effective and flexible leadership. They must be proactive and constantly adapt to departmental policies and community needs and support their staff to do the same. To master the various organizational and pedagogical tasks, ECEC managers must be competent in their work (Strehmel et al., 2019). To do so, it's imperative to ensure that those leaders who will continue to manage ECEC in the pandemic context receive all the support and resources that they need in order to mitigate adverse influences on well-being.

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Chapter 9

‘My Cup Was Empty’: The Impact of COVID-19 on Early Childhood Educator Well-Being



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‘It was a challenging time. We had to teach remotely, offer a centre-based program, and create take home packs. One teacher, three modes of learning; the expectation was most unfair and unreasonable. And yet there was no thanks – just a demand of more from us. It was a ridiculous time and really devalued the work we do and put us in the category of glorified babysitters!’ This comment from one of our study participants captures the dilemma faced by many early childhood teachers and caregivers during the COVID-19 pandemic. Societies around the world rely on early childhood education and care (ECEC) services to enable families to participate in the workforce (Pascoe & Brennan, 2017). In Australia, these services provide education and care to children under the age of 13 years in a range of settings, including centre- and home-based services for children aged 6 weeks to 5 years, and vacation and before and after school care services for school-aged children (Victoria State Government, 2021).

Not only do ECEC services support the workforce and economy, high-quality ECEC is associated with positive long-term learning and developmental outcomes for children (Shonkoff et al., 2012). The most important aspect of high-quality ECEC, which has the biggest impact on children’s outcomes, is the nature of educator–child interactions (Torii et al., 2017). Considered as ‘process quality’, consistent, rich and sensitive interactions between educators and children have been shown to be effective at lifting children’s educational outcomes (Torii et al., 2017). Despite playing such a large role in the provision of quality of ECEC programmes in Australia, the ECEC workforce is typically poorly compensated

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financially, and their contributions often go unrecognised in society. These factors can contribute to educators' poor work-related well-being (Thorpe et al., 2020a). When educators' well-being is compromised, it tends to exert a negative effect on the quality of education and care they provide to young children (Henry et al., 2021).

Early in 2020, at the start of the COVID-19 pandemic, the Australian Federal Government announced that ECEC was an essential service and that ECEC educators were essential workers (Parliament of Australia, 2020a). Thus, the majority of ECEC services across Australia remained open on-site for all children, in contrast to schools, most of which remained open only for children of essential workers and vulnerable children. The COVID-19 experience has shown that the necessity of ECEC services and educators is undeniable, as society relies heavily on the consistent provision of quality education and care (Gide et al., 2020). Given the importance of ECEC to the economy and to children's early learning and development, the value of educators should be recognised, and their well-being supported (Thorpe et al., 2020b).

Experts (Cumming & Wong, 2019a) have conceptualised educators' well-being holistically, and described it as a dynamic process that encompasses physiological and psychological aspects within sociocultural, economic and temporal contexts. Examples of these aspects include physical health, job satisfaction, financial security and emotional well-being. Although individual actions play a role in maintaining one's well-being, supporting work-related well-being is also the responsibility of the organisations that employ early childhood educators (Cumming & Wong 2019b). In a crisis, such as COVID-19, the role of the government in enacting supports for the well-being of essential workers is also critical. To prepare ECEC educators, organisations, policymakers, governments and workplace advocacy bodies for future critical incidents, research in this area is needed. Therefore, the current study aimed to outline the role of the Federal Government in supporting educators' well-being during the COVID-19 pandemic and to examine the impact of the pandemic on educators' well-being.

Background

COVID-19 in Australia

Australia's swift and effective management of the COVID-19 pandemic throughout 2020 has been an exemplar for the rest of the world. Before the introduction of the Delta variant in 2021, Australia was among the world leaders in detecting new COVID-19 cases, and containing the spread of the virus (Woodley, 2020). Indeed, Australia ranked eighth in the world for effective management of the pandemic (Blau & Tonkin, 2021). State border closures, mandated mask-wearing, travel restrictions, crowd limits and strict lockdowns in areas with high COVID-19 cases, such as Melbourne, were some of the strategies implemented by the Australian Federal Government.

To keep people in the workforce through the pandemic, the Federal Government moved swiftly in 2020 to introduce new legislation, including JobKeeper and the ECEC Relief Package (Australian Taxation Office, 2020). JobKeeper involved a direct monetary payment to businesses impacted by COVID-19 and was aimed at helping employers to continue to pay their employees. These businesses included ECEC services, most of which are privately owned in Australia. The ECEC Relief Package, which essentially removed costs to families for attending ECEC (in Australia nearly all families make a financial contribution for their child/ren to attend ECEC), was mandated by the Federal Government to encourage families to keep their children enrolled (Parliament of Australia, 2020b). Due to the unprecedented nature of the pandemic, and the rapid introduction and retraction of some policies, it is unclear whether these new policies had any benefits for supporting educators' well-being during such an unpredictable critical period.

COVID-19 and Educator Well-Being

Australian researchers are beginning to examine the toll that COVID-19 has placed on ECEC services, organisational leaders and educators (Logan et al., 2021). Despite Australia being held in high regard around the world in relation to managing the pandemic, the ECEC sector has been hard-hit in a variety of ways. For example, Eadie et al. (2021) found that the majority of the 232 educators in their study perceived that the COVID-19 crisis had negatively impacted their well-being. In another study, Quinones et al. (2020) found that educators increasingly experienced emotional labour during the pandemic, seeming to present a calm façade at work while suppressing the expression of stress and anxiety. Due to this emotional labour, educators in this study reported worsening psychological and physical health, increased burnout and job dissatisfaction (Quinones et al., 2020). Finally, another large-scale survey of 1500 educators in Australia found that educators' well-being was negatively impacted by the variety of practices associated with COVID-19, such as physical distancing and maintaining cleaning and hygiene practices (The Front Project, 2020).

Additionally, some studies have focused on the ways in which ECEC organisations supported educators' well-being during the pandemic. Logan et al. (2021) found that moral injury was prevalent among ECEC leaders and educators. Moral injury refers to 'a particular type of trauma characterized by guilt, existential crisis, and loss of trust that may develop following a perceived moral violation' (Jinkerson, 2016, p. 1). Logan et al. (2021) found that participants reported strong feelings of betrayal by policymakers, unions and governments during the COVID-19 pandemic. This finding is significant because experts state that the long-lasting impacts of moral injury include guilt, shame, anxiety and depression (Dombo et al., 2013). Moral injury can also lead to a loss of trust in oneself or others, demoralisation (Jinkerson, 2016) and damage to a person's self-identity (Dombo et al., 2013).

Given the uncertainty of the COVID-19 pandemic and the likelihood that other crises could occur in the future, it is important to examine the strategies implemented by governments to support the ECEC sector. It is also critical to better understand how educators' well-being has been impacted, especially considering their essential service to society. The aims of this study were to outline the governmental and organisational responses to the pandemic in relation to the ECEC sector and to understand the impacts of the COVID-19 pandemic on educators' well-being. The research questions were:

How effective were the governmental and organisational responses to the pandemic in relation to the ECEC sector?

How did the COVID-19 pandemic impact educators' well-being?

We hope that the findings of this research will inform the development of effective government policies and strategies that support educators' well-being, particularly during times of crisis.

Methodology

In this section, we outline our methodology, including research design and rationale, participants, procedure, ethical considerations and methods of data collection and analysis. This is followed by a report of results.

Research Design and Rationale

A survey using closed and open-ended questions was used to gather and analyse data and address the research questions. Closed questions enable researchers to gain a large number of responses to relatively easy-to-answer questions, while open-ended questions allow researchers to gain a more detailed understanding of a particular aspect being investigated, ensure that the closed questions have not missed some key aspect of the topic under investigation and allow participants' insights on a topic to be quoted directly from their responses (Newby, 2014). In the current study, closed survey questions were used to describe the sample and gain summary data of participants' experiences throughout the pandemic, as well as in relation to governmental policies implemented in Australia. Open-ended survey questions were included to gain in-depth understandings about the impact of COVID-19 on participants' well-being.

An interpretivist paradigm guided the analyses of the open-ended responses. Interpretivism seeks shared patterns of behaviours and acknowledges the human experience as a socially constructed reality (Mackenzie & Knipe, 2006). Thus, the study describes the social reality of educators' experiences during COVID-19. As such, this study was not intended to prove facts or universal truths (Creswell, 2014).

Participants

Participants were 831 early childhood educators and directors working in a variety of ECEC settings across Australia. There was some attrition throughout the survey response, as some participants chose not to answer all questions. When discussing the findings, the number of responses per question is noted. Participants had a range of experience working with children in ECEC: 38% had worked in the field for more than 20 years, 46% between 6 and 19 years and 14% for 5 years or less (2% indicated that they do not work directly with children). In relation to qualifications, 47% of participants had a certificate or diploma, 46% had either a 3-year or 4-year bachelor's degree, 5% had a master's degree or PhD and 2% had no formal qualifications. Most participants (62%) worked at a childcare centre, followed by preschool (34%), multi-purpose or integrated care (2%), occasional care (0.5%), family childcare (0.5%) and out-of-school-hours care (0.5%). A multi-purpose or integrated care service is one in which a range of programmes for children and families are available, such as counselling, allied health, supported playgroups and advocacy (Press et al., 2017).

The Australian Children's Education and Care Quality Authority (ACECQA) is an independent national authority that assists the Australian Government to implement the National Quality Framework (NQF). The NQF provides a national approach to regulation, assessment and quality improvement for ECEC services (ACECQA, 2017). Services in Australia are assessed and rated by ACECQA based on seven National Quality Standards (NQSs): educational programme and practice, children's health and safety, physical environment, staffing arrangements, relationships with children, collaborative partnerships with families and communities, and governance and leadership (ACECQA, 2017). Services are then given a rating on a scale of excellence (excellent, exceeding, meeting, working towards, and significant improvement needed). In relation to the ACECQA quality rating of the participants' early childhood services in this study, 5.6% were 'excellent', 43.5% were 'exceeding', 41.8% were 'meeting' and 6.7% were 'working towards' the NQSs. Only 0.2% were rated as 'significant improvement required', indicating that in general, the participants worked in good quality early childhood services. A few of the participants' workplaces (2.3%) were not rated. Most participants worked in permanent (ongoing) full-time positions (60.7%), with 33% working in permanent part-time positions and 3% in casual positions. In relation to their role at the early childhood service, 51% were directors, 12% teachers, 12% educators, 5.8% room leaders, 3.3% assistants, 1% worked flexibly across the service and 14.9% were 'other' (e.g. owner/manager, teacher/director). Most (78.6%) participants indicated that they work directly with children with additional needs. Participants worked with children aged 3–5 years (45.4%), mixed ages (44.6%), children under 2 years (5.4%) and children aged 2–3 years (4.6%).

Procedure

ACECQA maintains a publicly available email address database of all ECEC services in Australia. An information sheet, introduction to the research and survey link were emailed to each service listed on this database. Service directors then sent the survey information and link to the service educators if they chose to. A reminder email was sent to services 2 weeks after the initial email. The survey remained open for 4 weeks during March 2021.

Compliance with Ethical Standards

This study was approved by the researchers' university Human Research Ethics Committee and conducted in accordance with the Australian National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council, 2018). No information was collected in the study that could identify participants or services. An information statement was provided to all participants before they commenced the survey, and participants gave informed consent by starting the survey. Participants were free to complete as much or as little of the survey as they chose. There were no conflicts of interest to disclose.

Data Collection

A link to an online survey that included items from the Early Childhood Educator Well-being Survey (ECEWS), plus additional questions related to educator experiences of COVID-19, was emailed to participants. The ECEWS was developed by Cumming et al. (2021), and contains items derived from standardised instruments and additional demographic and work-context questions developed by researchers from extant literature. The ECEWS has 87 items: 85 pre-coded and 2 open-ended (Cumming et al., 2021).

In addition to the ECEWS, closed and open-ended questions specifically focused on educators' experiences during the COVID-19 pandemic were included in the online survey. These COVID-19 questions were adapted to the Australian context, with permission, from the UNESCO-UNICEF survey of the effects of COVID-19 on the early childhood workforce in the Asia-Pacific region (UNESCO, 2020). Only the results of the COVID-19 questions were analysed and reported for the current study. The closed questions focused on professional development training prior to COVID-19, whether or not and for how long the service had been closed during COVID-19, staff layoffs, measures taken to protect staff well-being, financial impacts and supports given, what training educators felt they needed to support their work

through the pandemic and guidance for working from home. The open-ended questions on which we report in this chapter were:

*If you have any other comments on COVID-19 issues, please share them below.
Is there anything else you would like to tell us, for instance, about things in your work that you consider to have an impact on your well-being?*

Data Analysis

Closed survey responses were summarised using descriptive statistics in SPSS – *Statistical Package for the Social Sciences* – and provide evidence related to educators' experiences during the COVID-19 pandemic. Phenomenology, which holds that important knowledge can be gained through the understanding of others' experiences, guided analysis of the open-ended response data (McMillan & Wergin, 2006). The analysis included the following six phases: (1) familiarisation with the data, (2) coding, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) writing up (Braun & Clarke, 2006). The responses to open-ended questions were first copied from the full set of responses and compiled into one document. Two of the authors then separately read through these responses to become familiar with the range of content. Thematic analysis (Braun & Clarke, 2006) was then used to interpret the responses to the relevant open-ended survey questions. Participant responses were systematically and separately reviewed by the same two authors to identify themes within each set of responses, then analysed for overarching categories within the data (Glaser, 2005; Glaser & Strauss, 1967) that might connect underlying themes between the questions and responses. The two authors then collaboratively discussed their inferences regarding this collated data, resolving discrepancies and deciding on the final set of themes. These themes, along with accompanying examples of educator responses, were sent to a third author for confirmation.

This inductive data analysis method allowed the researchers to describe participants' views without imposing preconceived categories on the responses. Strategies were used to ensure rigour in the thematic analysis. Given the data-driven coding, credibility was established by highlighting and prioritising the participants' voices (Milne & Oberle, 2005). Analytical integrity was maintained by reviewing the analytical phases in an ongoing manner to re-examine existing themes as new themes emerged.

Results

In this section, we outline results from the closed survey questions to give an overview of how COVID-19 impacted ECEC services generally. We then present findings from the open-ended survey questions in relation to the impact of COVID-19 on educator well-being.

Results from Closed Questions

A large majority (83.67%) of participants ($n = 545$) reported that their ECEC service remained open throughout the pandemic; the remaining (16.33%) participants reported that their service was closed on-site. When asked why their site did not close, most stated that it was a decision by the national government (70%), sub-national government/local leaders or community (13%), or the individual service (12%). Of the services that closed on-site ($n = 96$), the majority kept all staff employed (85.42%), 8.3% kept some staff employed and only 2.08% kept no staff employed (4.17% were unsure). In response to the question ‘Prior to COVID-19, on which of the following topics have you had any training?’ ($n = 546$), 11.5% had training on supporting young children through distance learning, 10.8% had training on crisis/disaster management and 8.4% had training on distance support for parents to promote early childhood education (ECE) at home. Most educators did not receive any training on these topics (80%).

Participants were also asked about the measures implemented at the service to protect staff well-being during the pandemic (see Fig. 9.1, $n = 536$).

Most services did not implement measures to support educators’ mental health or provide psychosocial supports. The focus was much more on excluding unwell staff, children and visitors, increasing cleaning and personal hygiene, and reducing group gatherings.

In relation to the Australian Federal Government’s role in supporting educators’ mental health during the pandemic, participants were asked about which national or sub-national government policy measures had been implemented to prepare ECEC staff for the COVID-19 response (see Fig. 9.2, $n = 481$).

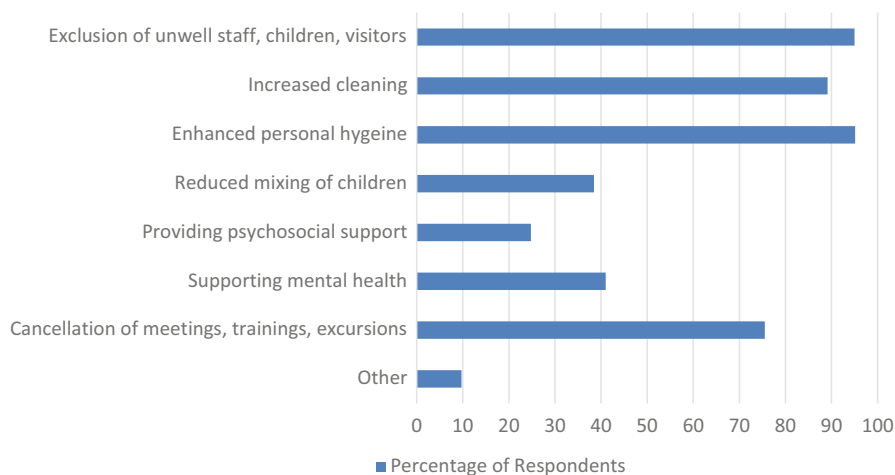


Fig. 9.1 ECEC service strategies implemented to protect staff well-being during COVID-19

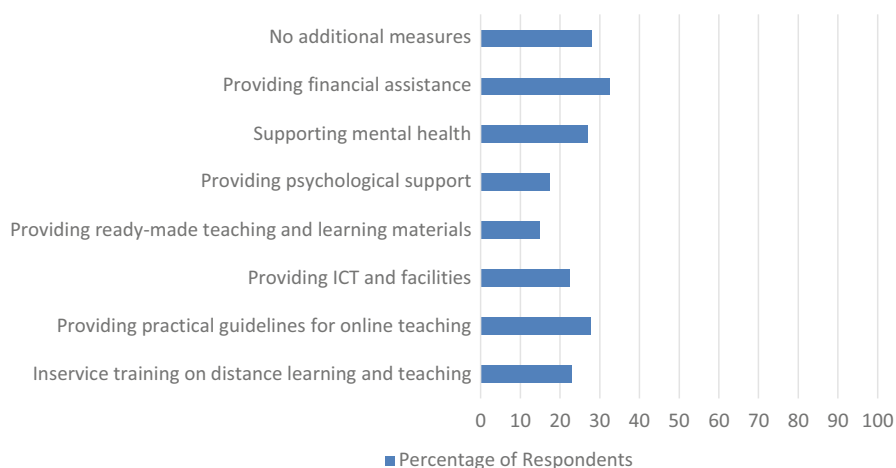


Fig. 9.2 National or sub-national policy measures implemented to prepare staff for COVID-19 response

These responses indicate a low level of support for educator well-being from the national and sub-national government. Other than providing financial assistance (reported by 33% of participants), less than 30% of participants reported that any of the other measures were implemented. In fact, 28% of participants reported that no additional measures were introduced.

Participants were also asked what financial supports were available to their ECEC service during the pandemic. Approximately one-quarter of participants (20.13%) indicated that no financial supports were received at the service. The remaining participants indicated that a range of financial supports were available (see Fig. 9.3).

More than half of the participants (58.4%) reported that statutory sick pay for people diagnosed with COVID-19 was available. The second most common financial support available (to 44.7% of participants) was statutory sick pay for people in quarantine while awaiting COVID-19 results. When asked if they had been approached by their employer to consider redundancy, layoff or a change to contractual hours worked ($n = 468$), 17.9% said 'yes'. Of those who answered in the affirmative to this question, 61.96% did not end up changing their employment situation, but almost half reduced their working hours (40.22%).

Results from Open-Ended Questions

In relation to the study research questions, themes were identified from analysis of the open-ended survey responses. The first research question was:

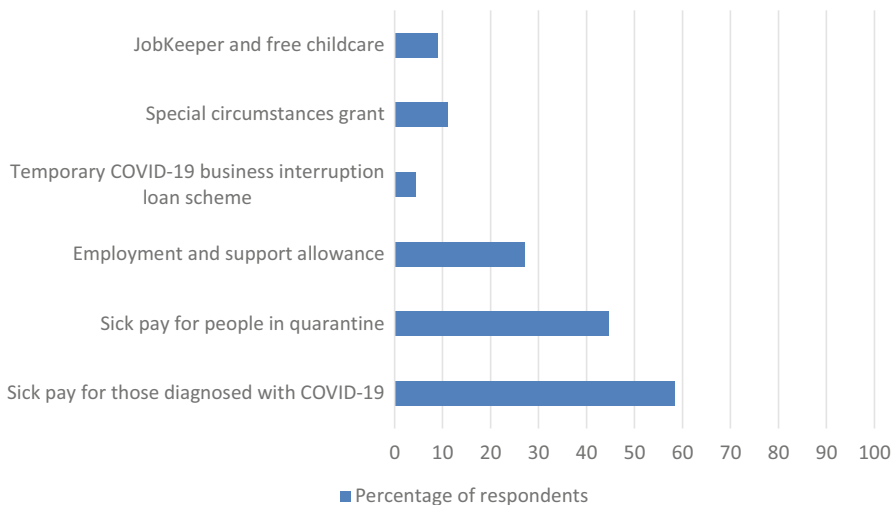


Fig. 9.3 Financial supports available to ECEC services during COVID-19

How effective were the governmental and organisational responses to the pandemic in relation to the ECEC sector?

A few participants stated that there was effective support from the government and from their ECEC organisation, noting for example: ‘Meditation apps were encouraged with staff and children and were effective in [supporting] mental health’. However, most participants indicated that not enough was done by either the government or the organisation. Two overarching themes emerged from the data: poor communication of information and lack of adequate support for the sector.

Poor Communication of Information Most participants were clearly disheartened by the lack of, or untimely, communication by the government in relation to their working conditions during the pandemic. For example:

We were always the last sector to know what was happening. Many times, we were not even mentioned in [government] press conferences. Owners, directors and educators not only found this deflating but devaluing.

While the sub-national government did communicate and report on the situation, including possible responses, these were not timely at all and did not support our decision-making process. It was our peak bodies who were the primary place for support.

Responses also indicated that ECEC staff felt unsupported by the federal and state government’s lack of practical guidance about how to manage through the pandemic. At times, staff found out important information from the media, rather than from direct communication from government channels. For example:

Half the time the department [of education] didn't even know what the government had announced. It was up to staff to work out what we were meant to do on a daily basis. There were some points we had NO access to hand-soap and sanitiser! Complete disgrace by our government. Cleaning supplies came late and guidance was always on a Sunday night at 10pm in [the Victorian State] education department!

Honestly – we didn't have much support and we still don't. We mostly found everything out on the News.

The unreliable communication and lack of practical translation of key information related to COVID-19 for the ECEC sector clearly resulted in frustration and a sense of invisibility, despite ECEC being recognised as an essential service. At the same time, it is notable that more reliable support was perceived to have come from the peak bodies for the ECEC sector during the pandemic.

Lack of Adequate Support for the Sector Participants reported that not enough was done to support ECEC educators and the sector during the pandemic. For example:

What hit me in Australia is how clear it is that [ECEC], from a gov[ernment] mindset, is based on childminding and allowing (let's be honest here) women, to go to work. This is also demonstrated in the funding structure, based around activity hours and not around the educational need of under 5s. What happened around C-19 demonstrated this very starkly.

I feel that as 'essential workers' throughout the COVID-19 crisis that we should have been rewarded or recognised in some way by gov[ernment] and our organisation. I am appalled that we are not prioritised for vaccinations when we are dealing directly with so many members of the public daily. Extra days off as a special reward were granted to state school teaching staff, but nothing was given to teachers in the community kindy sector.

Very little consideration was given to protecting our health and safety. Health workers have PPE [personal protective equipment], supermarket workers have plastic shields in place, schools were only open to those of essential workers. Early childhood centres were directed to remain open to all those that chose to attend, working with 20–50 children and their families with very little in the way to protect us. You cannot work with small children all day wearing a mask and keeping 1.5 m social distance.

Working through the COVID period was extremely hard mentally and emotionally on myself and team. While we felt the world stopped and stayed at home, we continued to come along to work each day in a job with high risk associated. We were never recognised financially for this or by the government. Teachers, healthcare workers. . . all publicly recognised. . . we worked more than teachers, teachers all stopped for the Easter holidays, we didn't. We had children in our care who had parents working in the COVID ward at the hospital. We can't social distance, we didn't wear protective clothing or masks. . . we work with children, they cough, sneeze in our face, we wipe their nose. It was mentally hard

when non-working parents continued to bring their children along to 'play because they are bored at home'. Then when childcare became free, it really did take a turn. This returned many more children, making our work even more high risk. We received two days paid holidays as a thank-you from our company – 6 mths after working through this difficult time. Our profession is so poorly paid yet clearly through a pandemic it is regarded as a service we cannot do without.

On top of inadequate communication and translation of critical information concerning COVID-19, the policy responses that concentrated on enabling families to continue working by granting free ECEC reinforced the perception that children's needs are not important. Participants were further disheartened by the dissonance of being recognised as 'essential workers', yet not afforded appropriate additional resourcing. The sense that ECEC work is unvalued by society was reinforced for participants due to being required to work, but without appropriate safety measures in place and with no direct compensation or acknowledgement.

The second research question was: *How did the COVID-19 pandemic impact educators' well-being?* Three themes were identified in relation to this question: negative impact on mental health and emotional well-being, negative impact on financial well-being and positive coping strategies.

Negative Impact on Mental Health and Emotional Well-Being Mental health and emotional well-being are two distinct concepts. According to the World Health Organization (2014), 'Mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community' (n.p.). Emotional well-being is an aspect of mental health that involves the ability to effectively manage emotions so that they do not impact one's life negatively (MindSpot, 2021). In relation to the first theme, four sub-themes were identified: increased stress, moral injury, emotional labour and systematic undervaluation. Participants reported increased stress levels during the pandemic. For example:

I've been not only managing the obvious changes brought on by the pandemic (social distancing, finding supplies such as hand sanitiser, toilet paper and gloves, increased concern about sick children, uncertainty about exclusion guidelines and policy changes, 'free' childcare, family anxiety, etc.), I've also been managing a stressed and anxious team. This has really taken a toll on the team and on me.

COVID has had a huge impact on my own as well as many other colleagues' overall health and well-being. While many others were able to work from home, we continued to work through the pandemic, often times our workload was doubled in order to care for the children in attendance as well as provide home learning for those at home. We were stressed and worried about our own health as well as that of our own families.

We expressed openly that some of us were experiencing a mental health crisis, unable to hold back tears at work, not feeling at all safe within our environments, concerned for our health and the health of our families and at breaking point.

Participants also reported experiences of moral injury. For example:

This industry revolves around relationship building with children and providing them a variety of educational avenues. Being deemed essential during COVID, yet completely dismissed in terms of our own needs has been incredibly demeaning. The fact that this country relies on childcare to keep everyone working, yet doing nothing to keep educators safe or financially compensated has been insulting and degrading.

Every morning I was driving past a sign saying 'Stay Home, Save Lives', and yet, I was educating and caring for children who could have stayed home and did not need to be in my care.

Less social recognition and low value on how early childhood workers educate and care for young children for their future – it was obvious how people see our job during lockdown. Even [though] we were open only for the children with parents as essential workers, there are people trying to get spots for their children, explaining it would be very difficult to have their child while they have other children on home schooling.

Having their basic needs and concerns for health and mental safety 'dismissed', while being required to provide these to others, contributed to participants' sense of moral injury. These experiences contributed to the sense that they had been 'used' to meet the agendas of governments, and of families, who continued to send children to ECEC even when they themselves were not essential workers.

Perhaps unsurprisingly, participants reported the requirement for increased emotional labour – the need to 'put on happy faces when they are feeling anything but happy'. For example:

The last year has been tough. There's always an expectation in early childhood to be 'happy' regardless of how you are really feeling, and that pressure has been increased in the last year – we've had to present a calm, normal, reassuring face to everyone when we've all been scared, stressed and unsure.

It was emotionally draining talking with families who were being severely impacted by COVID financially and emotionally. I was their sounding board during weekly conversations.

Participants also reported increased negative effects on their mental and emotional well-being from systematic undervaluation of the ECEC field. For example:

There are systematic failures in early childhood education. Our field is low paid compared to other teachers and other professionals with similar qualifications. I have years of expertise in my field, but my pay does not reflect this and I do not feel well respected in the community generally for the work that I do. Unfortunately, our experiences during COVID have highlighted these inequalities – while we were deemed 'essential services' our work had unsecure funding and pay in contrast to schools with very little consideration to the risk teachers and educators in early childhood settings were exposed to.

It was also frustrating to be treated very differently from schools – like we were an afterthought or of less value than schoolteachers.

'Moral' doesn't apply to our field. We often think we are the forgotten ones from the government. Facing these facts actually [made me feel] down and made me feel useless and powerless. This is [an]other fact why we are emotionally drained and feeling restless. Our work needs to be valued just [the] same as others.

Felt very undervalued and lost, scared and forgotten.

I don't feel what we were asked to do was reasonable and I don't feel our work was respected or valued. Providing 'home learning' as well as 'on-site' learning throughout all lockdowns was a massive undertaking. Running a large Kindergarten and supporting staff and families was a huge task and I do not feel there has been any recognition for that.

Participant responses in relation to the negative impacts on their mental and emotional well-being were strikingly intense. In a variety of ways, the COVID-19 pandemic has reinforced to ECEC educators that they are not valued in society, despite providing an essential service and playing a critical role in the lives of children. Some educators were so stressed by the additional burdens and expectations placed on them that they reported experiencing mental health breakdowns and burnout, and some even decided to leave the profession. Other educators were mentally drained by feeling they had to suppress their own negative feelings or emotions to be supportive of children and families attending their service. Educator experiences of moral injury were particularly worrying, as the violation of moral values can have long-lasting negative impacts on well-being and mental health (Litz et al., 2009). Increased emotional labour in a sector where burnout is known to result from emotional exhaustion is also concerning when considering the longer-term outcomes of the COVID-19 pandemic on the ECEC workforce.

Negative Impact on Financial Well-Being Participants indicated that they were negatively impacted financially, including through using their own funds to supply basic resources required in their work, exhausting sick leave and completing more unpaid work than usual. For example:

We ran out of wipes, hand sanitiser, paper towels and nappies [diapers]. Staff brought their own in as the place the centre orders through ran out due to people panic buying.

Many EC teachers & educators had to rely on their own personal computers, phones etc. to deliver remote learning – this is unacceptable.

There were a lot of challenges in services as educators battled with new technology, I took care packages out to all of my Kindergarten children with craft items and Mother's Day gifts. It was great to catch up with all the children, but it was all done in my own time.

No additional pay was received by myself, and I feel I worked to my own detriment to ensure the needs of everybody else were being met. I used up all my sick leave as a result of stress induced illnesses and had to take some time off without pay. Even though I was eligible for 'JobKeeper', it made no difference to my pay

packet and certainly didn't compensate me for time off when I'd run out of sick leave. So, I suffered financially as well.

Workload doubled – many hours of expected unpaid overtime working through holiday breaks to upskill. Not enough extra cleaning by other contractors; we were abandoned as far as training for online learning and online meetings – we had to research and train in our own time during stage 2 and 3 [lockdown]. We were delivering full time programs face to face to smaller groups but also expected to do online learning for those children whose families decided they wouldn't attend – too many hours expected.

Many participants contributed money and time beyond usual work requirements to ensure children and families continued to receive high-quality education and care. In addition, they used their own time to upskill in order to provide virtual educational services; they were not fully compensated for this time, nor that required for sick leave brought on by the stress of doing so.

At the organisational level, ECEC services were also negatively financially impacted by policy decisions. For example:

I felt very overwhelmed as we had to ensure the business survived, educators had work, we couldn't pay loans, we supported our families as they lost work or worked from home and had to deal with supply shortages. We had nowhere to turn to. Come Christmas we were SO exhausted by trying to keep it all together, I honestly slept for the first of the two weeks off.

No financial support (companies found it difficult to keep normal practice in the sense of pay and hours, many shut their doors never to re-open). Many of us lost hours and were lucky if we had leave to cover us to meet mortgage/rent/bills.

Free childcare almost closed our business because there was such a lack of financial support.

I feel childcare was treated poorly; having revenue reduced by 50%; having JobKeeper taken off staff. This has put additional financial and emotional pressure on educators and centres trying to make ends meet and being unsure if the centre will stay open because of cash flow issues.

My workplace dipped strongly into savings that were meant for a renovation, to ensure all educators to keep the majority of their hours and the team shared hours amongst them, so everyone had a little bit . . . in the last two weeks of lockdown (Melbourne), we had used up all the additional savings and had to give educators strongly reduced hours.

COVID affected rural communities differently. We doubled our enrolments as childcare was FREE. We were paid on our lowest income so ended up caring for 3 times the number of children for less than half of what we would have recouped in fees. Even with the original JobKeeper, as a not for profit (that relies heavily on fundraising) we were in dire straits.

The introduction – and removal – of policies designed to prop up the ECEC sector had many unforeseen consequences and highly fragmented effects. While some services used savings to keep staff employed or subsidised the business by accepting

reduced hours and pay, others could not sustain their business. The long-term effects on the provision of adequate amounts of ECEC to meet demand are yet to be seen.

Positive Coping Strategies Although the experience of the majority of participants during the pandemic was negative, some responses indicated that they had learned and implemented positive strategies to cope with the crisis. For example:

All in all, we responded well to a situation we have not prepared for. We provided excellent support to our educators, children and families. Very satisfied with our achievements in this area.

It was a time of great stress coupled with amazing opportunities to learn and develop new skills. Remaining focussed on what is important was key: 1) Relationships and compassion. Meeting individuals' needs at the point where they were needed, this was for families, children and staff. 2) Create a safe zone around the preschool, a sea of calm and control because we were focussed on caring for each other's health and well-being first through clear communication. 3) Change and increase communication via various methods to keep families isolating connected and feeling engaged. Families need calm and safe environments, many EC environments provided that during COVID. Staff flexed and altered their work roles, learned new skills in a matter of days and remained in the services potentially at higher risk than if they stayed home in isolation.

Whilst 2020 remains kind of a blur, I feel that I travelled through the various periods of the year based in Melbourne in a reasonably steady and secure manner. There were periods of great stress, where parents were attempting to give notice of their child's attendance, where media reports were pushing forward worst-case scenarios and so on for all industries' continued viability. I believe that the decision of Centre management (Committee and Centre Manager) decision to stick to our policies, and to gather information from ECE peak bodies and state and federal departments held us in check with the ability to continue to support the staffing group, children and families. This strategy for information gathering has continued into 2021.

Our staff have worked extremely well together & we have adjusted our practices to ensure the utmost of safety for staff, children & families, often using our own initiative from the information we had at hand. We would like to see that things that are promised are delivered e.g.: extra cleaning, cleaning supplies, and that critical information is forwarded in a timely fashion.

These positive experiences and reflections in many ways reinforce those reported earlier. When services had clear, consistent and reliable information from a trusted source (especially their management and peak bodies), they could plan in a timely and appropriate fashion. And, when services 'focussed on caring for each other's health and well-being first', they were more able to provide the 'calm and safe environments' that families and children needed.

Discussion

In relation to the first research question, *How effective were the governmental and organisational responses to the pandemic in relation to the ECEC sector?* the findings from our survey showed an overriding sense that the sector felt abandoned by the Australian Federal Government. Although there were some encouraging findings – for example, most services remained open and most staff retained their jobs – educators reported very little in the way of direct government supports for their mental health and emotional and financial well-being. Participants also overwhelmingly felt that the Federal Government communicated poorly and did not do enough to effectively support the sector. There was a perception that schools and schoolteachers were treated much better by the Federal Government, with greater recognition and rewards and by not being required to stay open. Service directors and educators also reported receiving little training in how to adapt to the pandemic (e.g. using technology to support home learning), or resources such as computers, ready-made materials or practical guidelines (see Fig. 9.2). These findings support recent research by Logan et al. (2021), who found that although ECEC organisational leaders did their best to support the well-being of their staff, they perceived that the Federal Government procedures and policies in relation to COVID-19 did not adequately support the sector.

Moreover, the newly created policies of JobKeeper and the ECEC Relief Package had varied effects on the sector, seeming to depend on the size, ownership and location of services. There appeared to be several unintended consequences of these policies, particularly of the ECEC Relief Package. For example, due to this policy, additional and sometimes new children attended ECEC services during the pandemic. Some participants reported that the government's focus was on keeping families happy and working, rather than on educators' health and well-being. However, it is important to acknowledge that epidemiological evidence indicated that, in the period that participants were reporting on (2020) prior to the Delta variant, children were not high-risk 'spreaders' of COVID-19 and the physical risk to educators was quite low (Munro & Faust, 2020). The availability of ECEC services during school lockdowns meant that families with school-aged children could support this learning because younger children continued attending ECEC services. At the same time, the educators themselves could not support their own family members, while being simultaneously expected to provide a stable and happy environment for others' children. This inequitable treatment of educators contributed strongly to their reported sense of moral injury and devaluation.

There were indications that some organisations and peak bodies had stepped into the breach that the Federal Government left regarding practical, reliable supports for the sector, which also supports the findings of Logan et al. (2021). At the same time, as illustrated in Fig. 9.1, respondents reported that while plenty of strategies were implemented by their organisations to protect physical health (such as increased cleaning, hand washing and exclusion of the sick), very few strategies were offered to protect educators' mental health and well-being. Although case numbers and

deaths from COVID-19 were low in Australia in 2020, our results indicate that educators felt that the pandemic negatively impacted their well-being and mental health. This supports the recent findings by Eadie et al. (2021), in which 86% of participants reported that the pandemic had negatively impacted their well-being.

In relation to our second research question, *How did the COVID-19 pandemic impact educators' well-being?* the impacts of the poor communication and piecemeal supports from the Federal Government for the early childhood sector were significant and deeply concerning. The sense of moral injury from remaining committed to supporting families and children, while having their own needs ignored, was very strong across the open-ended data. Participants felt confronted by the reality of the Federal Government's lack of care for them and lack of recognition of the value of the ECEC sector. Participants also felt that the Federal Government's use of the ECEC sector as an instrumental workforce participation strategy failed to acknowledge the educational needs of children. When left unaddressed, moral injury is known to have increasingly detrimental effects on sufferers (Dombo et al., 2013), particularly on mental health. For a sector reliant on the emotional work of educators, the moral injuries surfaced through our research could result in poorer quality experiences and outcomes for children and families (Logan et al., 2021). This is clearly an area requiring systemic attention.

Remaining open and available during the height of the COVID-19 crisis also required higher than usual levels of emotional labour from participants. Trying to present a 'calm, normal, reassuring face' to others became increasingly draining as participants had to support families in their distress, while being unable to acknowledge or deal with their own. These findings support those of Quinones et al. (2020), who also found an increase in amount and intensity of emotional labour among educators during COVID-19.

Participants' financial well-being was also damaged by the pandemic. Although some financial supports were offered by the government, many services and educators were paid for fewer hours, provided more unpaid overtime and used their own money to buy basic supplies for their service. Participants also reported having to spend personal time upskilling, and to use personal computing and communication equipment to continue to deliver online learning when their on-site services closed. Others reported using holiday pay to cover their ongoing housing and household bills in the absence of enough paid work hours. It is no exaggeration to say that participants subsidised the viability of their 'essential service' with their own effort and funds.

While the overwhelming response of participants was distress, there were some who had been able to enact coping strategies. In these cases, strong organisational support and leadership seemed to play a role, but further focused enquiry is needed to understand more about what enabled coping during a time of intense stress in the sector. This mixed finding of both positive and negative impacts also supports Eadie et al.'s (2021) findings that although educators reported that COVID-19 negatively impacted their well-being, the quality of educator-child interactions did not suffer.

Strengths and Limitations

There are several strengths of this study. Firstly, the participants were a large sample of early childhood educators across all states in Australia. Also, the data included responses to closed and open-ended questions, which gives a well-rounded picture of what was happening to the ECEC sector during the COVID-19 crisis. Finally, responses to the open-ended questions were extensive and rich. Participants seemed eager to share accounts of their experiences, resulting in honest and raw narratives. A weakness of the study, however, was that the survey was too long, taking approximately an hour to complete, and there was some attrition by the end of the survey. Future studies should be mindful of the length of time required by study participation, to minimise the burden on ECEC educators, who are already short of time. It is also possible that educators who chose to participate were more extreme in their feelings; therefore, we do not know if our findings are representative of all ECEC educators' experiences. Finally, this study was conducted at one point in time during the ongoing COVID-19 pandemic. Thus, our findings represent only a snapshot of ECEC educators' experiences at that time.

Implications and Future Research

The COVID-19 pandemic has provided an unprecedented opportunity to explore the effects of natural disasters on educators and the ECEC sector. The learnings from research conducted during this time, such as the current study, must be used to develop, and subsequently test, strategies that can be mobilised to better support educators during times of crises. Given the findings from this study, some particular avenues to explore are how educators' resilience can be bolstered and built so as to reduce educator stress, lessen moral injury and ease the emotional labour they experience. In-depth qualitative studies of those who managed to sustain well-being during the pandemic could also contribute important insights to inform future planning.

Conclusion

Although Australia was ranked eighth in the world for effective management of the COVID-19 pandemic before the Delta variant (Blau & Tonkin, 2021), it appears that its performance regarding supports for the essential ECEC sector has been far from laudable. Further, the policies put in place to assist organisations and businesses during COVID-19 – such as JobKeeper and the ECEC Relief Package – had very uneven effects on the ECEC sector. Educators carried on with their essential work, despite significant professional challenges and costs. The combination of a sense of a

lack of recognition, notably by the Australian Federal Government, and the negative impact on mental health and emotional and financial well-being, left the sector feeling undervalued, forgotten and disrespected. Given the ongoing nature of the pandemic, more effective support for educators' well-being is needed.

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Chapter 10

Early Childhood Educator Well-Being During the COVID-19 Pandemic: A Qualitative Study and Emic Perspective



Lynne Lafave , Alexis D. Webster, and Ceilidh McConnell

The early childhood education and care (ECEC) sector serves a critical role supporting the development of future generations. Over half of Canadian children 5 years and under receive care outside the family home (Statistics Canada, 2021a), with full-time care most commonly utilized (Statistics Canada, 2021b). Early childhood (birth to 5 years) is a sensitive period for cognitive, social, and emotional growth, while also a crucial time for establishing healthy habits that tend to persist throughout the lifespan (Goldfield et al., 2012; World Health Organization [WHO], 2019). Consequently, there is great responsibility for ECEC centers to create environments that optimize development and ensure positive outcomes for children.

Background

Educators' own well-being is a key factor, among others, that impacts the quality of care provided in childcare (Cumming et al., 2020). While research and interventions in the early childcare context commonly address child health, educator well-being is under-researched and overlooked. This represents a missed opportunity as educators whose well-being is compromised are likely to struggle to provide optimal care.

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Educator Well-Being

Well-being is a critical component of mental health (Moreno Fortes et al., 2020). It is a concept that can be defined in many ways and may differ depending on contextual factors. Cumming and Wong (2019) propose a comprehensive well-being definition for early childhood educators:

A dynamic state, involving the interaction of individual, relational, work-environmental, and sociocultural-political aspects and contexts. Educators' well-being is the responsibility of the individual and the agents of these contexts, requiring ongoing direct and indirect supports, across psychological, physiological and ethical dimensions. (p. 276)

This multilevel, interactionist approach acknowledges that an educator's well-being depends on their internal psychological state and highlights the impact of several contextual factors. Therefore, it is necessary to explore external factors that impact well-being and consider how to best support it at all levels, from the individual to the sociocultural-political, in order to cultivate a comprehensive understanding of the ECEC workforce's well-being.

Work in ECEC is considered challenging and yet, research tends to focus on children's well-being with limited focus on educator well-being (Cumming et al., 2020). While children's well-being is essential, positive outcomes for children are linked to the well-being of educators (Nislin et al., 2016); therefore, attention to educators' well-being is vital. Educators are likely to experience high workplace demands, low levels of control, and low social support while simultaneously receiving poor financial compensation for the amount of work they are asked to complete (Wagner et al., 2013). Determinants of educator stress identify these as hazardous conditions that increase workplace stress (Wagner et al., 2013). Findings from Moreno Fortes et al. (2020) suggest that general workplace stress has a direct negative impact on mental health while indirectly increasing the risk of burnout. In addition to these stress-inducing conditions, educators tend to experience physical fatigue and cognitive weariness at work that also contribute to burnout (Skaalvik & Skaalvik, 2011). This highlights the value of exploring educator well-being in order to support positive workplace environments and increase workplace retention rates.

Educator well-being is foundational to optimal care in ECEC centers and demonstrates a significant relationship with both children's well-being and the quality of care children receive (Cumming et al., 2020). When educators perceive positive workplace well-being, it contributes to a positive learning environment, thus creating better child outcomes (Nislin et al., 2016). Educators' actual and perceived well-being bears weight in supporting healthy development and happiness of children attending childcare.

COVID-19 and ECEC

The COVID-19 outbreak was declared a global pandemic by the WHO on March 11, 2020, and resulted in the first wave of stay-at-home orders from governments around the world (WHO, 2020a). One month after the initial shutdown, ECEC centers were allowed to reopen and resume childcare under-regulated guidelines to minimize the spread of the virus (Government of Alberta, 2020). The return-to-work guidelines included stringent surface and toy sanitization, limited in-person visitations, and the establishment of cohorts to reduce contact with colleagues and other families as a measure to minimize infection rates. These new guidelines altered educator professional practice, and have been reported to impact the practices in nutrition and physical activity in childcare environments in Alberta (Lafave et al., 2021).

Research Questions

The purpose of the present study was to explore educator's perspectives on how the COVID pandemic impacted their well-being. The following research question was addressed, how has the COVID-19 pandemic, public health mitigation measures, and ECEC return-to-work guidelines impacted educator well-being?

Methods

The context for this study places it just after the first wave of the COVID-19 pandemic and before the start of the second wave. Communication regarding safe practices to reduce the spread of the virus represented a shifting landscape. Initially, public health strategies directed at individuals to reduce the viral spread of COVID included handwashing, avoiding touching the face, distancing, and isolating when sick (WHO, 2020b). The exact distance required to be physically distanced was contested and masks/face coverings were not part of the initial narrative. This lack of certainty to protect oneself was the environment in which educators returned to frontline work.

Critical Ecology Framework

The current study utilized a qualitative approach, guided by the critical ecology of the early childhood profession framework. This framework, as described by Dalli et al. (2012), indicates that the educator, along with the children and families they work closely with, is the center of a dynamic system (Fig. 10.1).

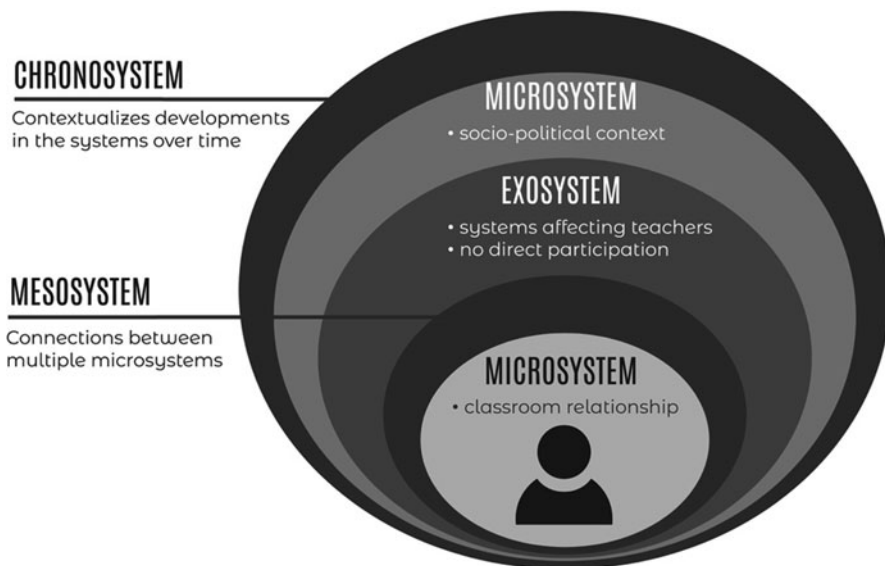


Fig. 10.1 Critical ecology framework. (Source: Adapted from Dalli et al. 2012)

Educators and their practices are impacted not only by their daily interactions within the ECEC environment but also the more external systems they operate within, which include the socio-political context and decisions made by policymakers (Dalli et al., 2012).

Research Design

In order to respect and recognize the internal or emic perspective of educators as frontline workers during the COVID pandemic, a qualitative description design approach was chosen. This approach allowed for a rich understanding of a phenomenon, the interpretation of it from those experiencing it (Bradshaw et al., 2017), and fits well with the aim of this study to capture the impact of the COVID-19 pandemic on the well-being of educators. Individual interviews provide participants with the opportunity to fully share their thoughts and unique experiences, resulting in a profound interpretation of their circumstances (Kallio et al., 2016). All names used for reporting are pseudonyms. This study was approved by the Mount Royal University Human Research Ethics Review Board.

Participants

Purposive sampling was used to recruit participants from a pool of 192 providers at 67 licensed center-based ECEC childcare programs across Alberta, Canada, that were a subset of a larger ongoing study investigating a health and wellness educational support program. Participant criteria included full-time employment at a center-based childcare program operating with children in care during phase one or two of COVID restrictions. Participants were employed at 20 different ECEC centers from 7 municipalities and compensated with a \$25 gift card for their participation. Geographically, center participation represented differing populations with most centers from large urban population locations (Table 10.1). Two centers were considered rural or small population centers despite being governed under a larger municipality. Ten of the ECEC centers identified as not-for-profit (50%), while the other half were for-profit ($n = 10$).

Data Collection

The research team conducted semi-structured, one-on-one interviews with participants through an online communication platform (Google Meet) between July and October 2020 in order to comply with pandemic physical distancing requirements. Interviews were conducted by the research team community leads who held an established peripheral relationship with the participants. The study's purpose, assured confidentiality, request to audio record the interview, and invitation to clarify questions or inquiry were described to participants prior to conducting the interview. Participants were asked the following questions: (1) How has the current COVID pandemic impacted your well-being as an educator? (2) What are the supports you have or would like to have with regard to COVID that would help you with your well-being as an educator? (3) What are the barriers that you may have experienced with regard to COVID that impacted your well-being as an educator? The interviews were transcribed verbatim, participants names replaced with pseudonyms, and the transcripts reviewed by authors for accuracy.

Table 10.1 ECEC center demographics

Variable	ECEC centers ($N = 20$)
Geographical location	
Large urban population center	13
Medium population center	5
Small population center	1
Rural	1
Center characteristics	
Not-for-profit	10
For-profit	10

Data Analysis

Data were coded (NVivo Mac – Release 1) inductively through thematic analysis guided by a six-phase process (Maguire and Delahunt, 2017). Briefly, these steps include: independent reading of transcripts, frequent meetings to discuss codes and production of a codebook, independent coding of transcripts with subsequent meetings to assess coding consistency, additional discussions regarding potential missing codes and/or concepts, collaboration on identification of code trends, and multiple meetings to refine and name themes through consensus.

Rigor Three strategies contributed to the dependability, authenticity, credibility, and transferability of the results: (1) a structured interview guide, (2) a collaborative and recursive coding strategy, and (3) the quality of the data (Bradshaw et al., 2017; Kallio et al., 2016).

Results

Twenty-three early childhood educators (11 teachers and 12 directors), all employed full-time, participated in the study. On average, teachers were 32.6 years old with 5.4 years of experience as a childcare provider and directors were 46.2 years old with 6.0 years of experience as a childcare director. Detailed participant demographics are presented in Table 10.2.

Distress and Resiliency

Results on educators' perceptions on the impact of COVID on their well-being are presented in two ways: the experience of distress and the experience of resiliency. Table 10.3 identifies the frequency of these experiences for both directors and teachers. Overall, teachers (91%) and directors (83%) identified experiencing

Table 10.2 Participant demographics

Variable	Teachers (<i>N</i> = 11)	Directors (<i>N</i> = 12)
Age, in years: mean (SD)	32.59 (8.09)	46.23 (11.84)
Experience in current role, in years: mean (SD)	5.41(5.07)	6.00 (7.00)
Female (%)	100	100
Education		
CDA course	2	0
CDS diploma	7	9
University degree	2	3

CDA child development assistant, *CDS* child development supervisor, *SD* standard deviation

distress since the onset of the pandemic. When discussing the experience of distress, five major themes were identified: overworked, social disconnection, uncertainty, financial stress, and powerlessness. Resilience was reported by most directors (92%) and teachers (73%) in connection to the onset of COVID. However, the types of resilience identified differed between teachers and directors. Teachers more often reported coping strategies and adaptation approaches while directors reported statements of agency and social connection (see Table 10.3).

Distress and Sources of Distress

Distress was defined as the experience of a negative emotional state in response to a stressor. Participants reported that the pandemic caused disruptions to aspects in their personal life and professional practice, which became sources of stress and led to feelings of distress. Table 10.4 summarizes the five major themes that emerged in regard to educators' experiences of distress due to the pandemic.

Overworked

Government-mandated COVID-19 guidelines were implemented in ECEC centers in order to prevent the spread of the virus, which added to educators' responsibilities. This posed new challenges to their daily routine, particularly the time and effort it took to clean and sanitize, which resulted in working longer hours often leaving staff exhausted. Furthermore, additional staff to cover these new obligations were seldomly hired due to a lack of financial resources.

We are definitely way more tired. We are overworked and underfunded. There is extra cleaning – everything is extra – but there isn't extra staff or supplies to make it all happen, or time in the day. (Vivien, Director)

Table 10.3 Frequencies of themes mentioned by teachers and directors

Theme	Teachers ($N = 11$)	Directors ($N = 12$)
Distress	10 (91%)	10 (83%)
Overworked	6 (55%)	5 (42%)
Social disconnection	9 (82%)	8 (67%)
Uncertainty	7 (64%)	7 (58%)
Financial stress	4 (36%)	4 (33%)
Powerlessness	7 (64%)	6 (50%)
Resiliency	8 (73%)	11 (92%)
Self-care strategy	6 (55%)	2 (17%)
Adaptation	7 (64%)	5 (42%)
Agency	2 (18%)	10 (83%)
Social connection	5 (45%)	8 (67%)

Table 10.4 Distress: Key themes summarized

Theme	Key theme concept
Overworked	Increased workload in order to adhere to the COVID-19 protocols
Social disconnection	A lack of social connection with others; may include feeling unsupported in their practice
Uncertainty	Apprehension about the future
Financial stress	Negative impacts due to the lack of financial resources
Powerlessness	Diminished control over practice and situation

Social Disconnection

Social disconnection is described as the lack of high-quality relationships and the inability to rely upon relationships (Holt-Lunstad, 2018), including feeling unsupported and undervalued. Physical distancing protocols and the implementation of cohorts in ECEC left educators feeling a loss of connection to their colleagues, children, and families in their workplace as well as friends and family in their personal lives.

Staff cannot even have lunch together anymore – you have to stay in your room. I cannot come to your room, and you cannot come to my room so there is no connection between everybody. Everybody is just doing their own thing. So, there is a divider or a schism between each of them. (Haley, Director)

Some educators experienced neglect from regulatory bodies within their center and at the government level.

I feel they [supervisors] don't acknowledge that our mental health is very important in how we reflect ourselves in the classroom. If you are not having a good mental health state, the way your eating habits are, they change because you are not in that good headspace. So, for myself specifically I found that I can't teach the way I would like to. I am not feeling very passionate about what I am doing in the classroom because it is very basic. I feel like I am just the cleaner and the watcher and that is it. If my center would, I think, acknowledge the efforts we put in prior to COVID and all the things that we were doing, I feel like I would be more appreciated, but at this point I don't feel the passion is there with a lot of the educators because what we have been doing for so long as been ripped away from us so quickly. (Rosa, Teacher)

Uncertainty

Uncertainty is the fear of the unknown and can be experienced when circumstances have unclear, unpredictable, and complex characteristics; when information is perceived as unavailable, contradictory, or inconsistent; and when individuals are not confident with the information they have or generally, the public knowledge (Brashers, 2001, p. 478). The COVID pandemic created uncertainty in many different areas, and participants reported feeling uncertain about the future and how the pandemic would progress.

I guess, just wondering how things are going to go, wanting things to be back to normal, and those are all barriers, like getting people back to work and those kinds of things. (Martina, Director)

This led to experiencing distress due to the possibility of transmitting or contracting COVID in their center (i.e., COVID fear) and managing COVID guidelines.

. . . it is the anxiety that every day that I want my kids to just play with each other, but they can't. It changed, and then the anxiety that I don't know where my kids went on the weekend or when we let them go, and they go and then they come back with us. Yes, handwashing and social and physical distancing, but still kind of the fear is there. (Yasmin, Teacher)

Financial Stress

The COVID pandemic created a shortage in financial resources causing many educators to feel financially stressed. Financial stress is defined as the inability to meet current or future financial obligations (Friedline et al., 2020). This stress included statements of job insecurity, the fear or uncertainty that one may lose their job. Some teachers expressed there were not enough hours (i.e., wages) to be distributed to all staff and feared the possibility that they would lose their wage if they showed symptoms or contracted COVID.

What stresses me the most is thinking I get sick and I don't get paid, you know? . . . I don't want to get sick because I know I am not getting anything from that, and even if I get a sore throat or anything like that, like it is too limited, and any symptom of a common flu could be, for me, no work for five days. (Sabine, Teacher)

Directors noted that low enrolment and new cleaning costs impacted their financial freedom to cover operation costs and limited the number of staff returning to work.

We are not making any profit, and it is really hard to even pay the staff, and you can use a lot of staff because there is a lot of cleaning. We clean four times a day: in the morning, after snack, we clean after lunch, and we use a deep cleaning, not only the spray, when we clean the toys, so we need more staff. (Beatrice, Director)

Powerlessness

Educators reported feelings of powerlessness in their professional practice since the onset of COVID. Specifically, educators indicated that their role and responsibilities shifted in order to follow the government-mandated COVID guidelines, which hindered program planning and delivery.

We have to be, like, just like stuff we need to do and your priority is the kids, right? We can't really plan stuff with the kids when we don't have the means to do it. It is hard. (Farah, Teacher)

As a result, educators no longer felt they had control over their practice at their center.

I would say it is a lot of emotional changes for the educators too because we can't teach the way that we want to teach, and like, how I value children interacting with each other in kind of close quarters, but also sharing. (Rosa, Teacher)

Resiliency and Sources of Resiliency

Resiliency is used to describe the continued positive or successful functioning during adverse events (i.e., ability to effectively cope with stressors) that led to positive outcomes (Brown & Westaway, 2011). Despite the challenges of COVID, participants expressed feeling resilient, although the sources of this resiliency differed between teachers and directors. Teachers tended to use emotion and avoidance-focused coping strategies and adaptation. Alternatively, directors tended to use problem-focused strategies, such as exercising agency and relying on social connection to cope with stressors. The sources of resiliency for both teachers and directors are summarized in Table 10.5.

Coping

Many teachers implemented coping strategies that were commonly based on improving emotional response to stressors (e.g., mindfulness, meditation, physical activity) or engaging in activities that allowed for distraction from stressors (e.g., reading, taking baths).

We have to focus, we have to work. So, keep physically active, sleep well, eat well, meditate, listen to some calming music, be around positive energy and talk more about positive things rather than negative things. So that is something that keeps you going. (Alicia, Teacher)

Table 10.5 Resiliency: Key themes summarized

Theme	Key theme concept
Coping	Many teachers noted using emotion and avoidant-focused strategies to cope with stressors
Adaptation	Adapting to the new situation
Agency	Directors expressed their ability to create successful outcomes
Social connection	Directors reported feeling supported and connected to others

Adaptation

Teachers indicated that they adapted to the changes by familiarizing themselves to the protocols, adjusting to the new routine, and creating a work–life balance. Some directors indicated the necessity to adapt to the new situation COVID brought; however, they more often expressed their agency as a way of dealing with the challenges than adaptation.

Yes, we are trying to adhere to all the new things of, okay, we can't do this and can't do that, but okay, let's try and find a way to be able to do something. So, they all want to colour and playdough and all that stuff, so we are finding ways where they have their own little container and are not sharing and having their own sense of self and having their own stuff. (Alia, Teacher)

Agency

Agency is an individual's "capacity to initiate and the enactment of this capacity to actively direct his/her professional life in accordance with his/her own will, judgement and choice" (Hadar & Benish-Weisman, 2019, p. 138). Directors felt the weight of responsibility for ensuring the health and safety of others, COVID guidelines implementation, and managing their staff. Yet directors expressed confidence in their competence and attributed their ability to plan to successfully manage the challenges of COVID.

I think in the beginning it was very scary for everyone because we didn't know what to expect. We have everything in place, but we are not sure how our plan is going to work. But luckily because we spent a lot of time planning our stuff it kind of helped us get things going and it went smoothly. (Haley, Director)

Social Connection

Social connection is defined as the high-quality relationships and the ability to rely upon relationships (Holt-Lunstad, 2018), including feeling supported and valued. Directors were authorized to continue in-person communication with their staff and parents at the center, which provided feelings of social connection and buffered the negative impacts of COVID on their well-being. Notably, some teachers echoed that their director was supportive during this time.

I am going to focus on the people that are back and try and do things for them. So, I guess I would say having some sort of pat on the back for my staff, like I have written notes and even give, like, monetary bonus kind of thing for the people that have come back and just tried to keep them mentally healthy and happy, and glad that they made this decision. We have tried to really create a team atmosphere, and I would really love to see something for my team – like supportive for my team – just so they can feel good about being back and stuff. (Martina, Director)

Discussion

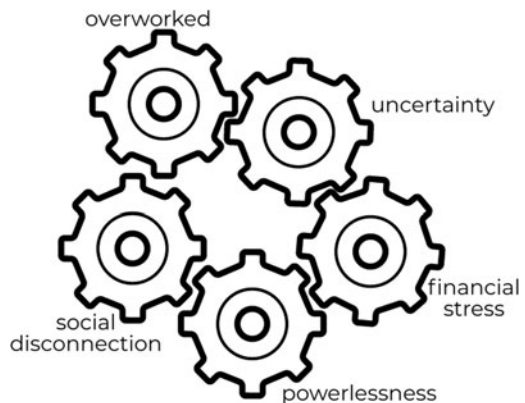
Our study adds novel insights into the distress and resiliency factors experienced by frontline early childhood educators in response to a global pandemic. Almost all educators experienced distress at some point from the onset of the pandemic. Distress factors, similar for both teachers and directors, were expressed in five key themes: overworked, social disconnection, uncertainty, financial stress, and powerlessness (Fig. 10.2).

Distress

With the growing reliance on formalized care for young children, ECEC environments share a critical responsibility in the physical, emotional, social, and cognitive needs of the developing child. The compromised well-being of early childhood educators is noted to negatively influence a child's well-being (Cassidy et al., 2017; Ota et al., 2013). Investigating the sources of distress among early childhood educators is a critical first step in understanding potential impacts of COVID within ECEC environments in order to identify how to best support the early childhood educator workforce.

Educators identified that stringent cleaning and sanitization governmental guidelines required of them, left them feeling overworked and emotionally exhausted. Deep cleaning duties throughout the day are not part of the educators' concept of ECEC professional practice. These duties are "over and above" their usual teaching responsibilities, further contributing to a sense of invisibility with regard to their personal well-being. Feeling overworked and exhausted are factors that contribute to burnout, which is associated with lower quality of care and may also result in higher job turnover (Carson et al., 2017; Cumming et al., 2020; Nislin et al., 2016). This is of concern because strong, consistent teacher–family relationships have the potential

Fig. 10.2 Early childhood educators' distress in response to COVID-19



to provide the child with a stable environment where they feel supported and thrive (Cassidy et al., 2019). High job turnover and disruption of the teacher–family relationship negatively impact child development in an already difficult pandemic environment, which may have considerably negative impacts on child health. The increased burden of cleaning that was foisted onto educators negatively impacted both their happiness and meaningfulness that they previously subscribed to their teaching role (Hall-Kenyon et al., 2014).

Social disconnection resulting from physical distancing and cohort guidelines was identified as a source of stress for educators. In order to reduce the spread of infection, educators were limited to interacting with only a few colleagues within their own cohort, experienced limited or no interactions with parents, and minimized physical contact with children. The distress of social disconnection aligns with research identifying social support as a key factor of well-being. Components that support social connections, such as positive and supportive relationships with colleagues, supervisors, and families, have been demonstrated to contribute to a sense of belonging and job satisfaction (Skaalvik & Skaalvik, 2011; Yuh & Choi, 2017). Additionally, the loss of physical interaction resulting in the inability to nurture and console children was expressed as a concern. A positive relationship, including the ability to have close contact and to express warmth to the child, between the educator and child, facilitates healthy development (Brebner et al., 2015). Social connection and collective care within the classroom is an essential component of a critical classroom community (Swadener et al., 2020). Physical and social distancing disturbed the typical social support employed within the ECEC community, which created significant distress among educators.

Educators expressed increased feelings of uncertainty from various sources including role ambiguity, job insecurity, and environmental risk (concern of contracting COVID). Uncertainty can be described as a complex multifaceted, interconnected, and temporal feeling (Brashers, 2001). An unprecedented atmosphere of global uncertainty and “unknown” is associated with the COVID pandemic impacting economic, financial, social, and physical aspects of individuals worldwide. The “fear of the unknown” represents a fundamental human fear that produces a great deal of anxiety (Carleton, 2016) aligning with the uncertainty expressed by educators in connection with the COVID pandemic. Role ambiguity is a type of uncertainty that describes a situation in which an employee has an unclear and uncertain perception of defined work responsibilities and behaviors that has been related to emotional exhaustion in early childhood educators (Løvgrén, 2016). In order to reopen frontline services as part of COVID mitigation, many ECEC centers restructured work responsibilities and priorities that did not include consultation of returning teachers, resulting in increased feelings of role ambiguity and powerlessness over their practice. This type of uncertainty has been linked to work-related distress (Anderson et al., 2019). The progression of the COVID pandemic resulted in shutdowns and consequently job loss. These conditions left several ECEC educators worried about their current and future employment status. Job insecurity is a stressor that may be felt when there is a perceived fear or worry that one might lose their current job, which negatively impacts mental and physical

health (Menéndez-Espina et al., 2019; Wagner et al., 2013). Educators expressed uncertainty if their employment would increase their environmental risk of contracting COVID resulting in transmitting COVID within their center, losing working hours, and potential financial stress. Educators' sentiments of worry regarding their own health, health of colleagues, and the health of their family are also echoed by educators in the United States (Swadener et al., 2020).

Economic uncertainty contributes to job insecurity, which impacts identity, psychological well-being, and is positively related to job insecurity (Godinic et al., 2020). Early childhood educators often report feelings of being underpaid and undervalued (Wagner et al., 2013). Low wages, accompanied by a lack of benefits, have been demonstrated to negatively impact job turnover and as a result, the quality of care provided (Cassidy et al., 2017). The concept of meeting one's financial responsibilities is fundamental to personal self-efficacy, and evidence supports that educator financial well-being is critical to an overall sense of personal well-being (King et al., 2016). In the current study, there was concern regarding financial well-being and employment stability. The potential to contract COVID and resulting self-isolation was identified as a feature of economic uncertainty as educators reported being unpaid if isolating due to COVID exposure. Directors expressed dual concern of center operation and associated employees in addition to their own personal financial obligations. Strong connections of economic uncertainty and psychological well-being clearly were impacted at the financial level for educators.

Within the current study, the COVID pandemic disrupted daily operations and, in response, many centers restructured educators' work responsibilities and priorities without consultation, which increased educators' feelings of powerlessness. The ability to participate in decisions regarding one's professional practice and classroom results in an improved perception of work experience (Cassidy et al., 2019). A perceived lack of professional autonomy in educators leads to job dissatisfaction and higher job turnover (Oosterhoff et al., 2020). Teacher perceptions of control and empowerment have been correlated with preschool emotional behavior and social competence indicating that distress in this aspect can have a direct negative impact on childcare quality (Cassidy et al., 2019).

Resilience

While substantial levels of distress were shared in the current study with regard to the impact of the COVID pandemic on personal well-being, educators expressed a powerful theme of resilience. This aligns with findings that distress substantially increased in response to the pandemic followed by diminishing distress levels presumably linked to increased resilience efforts (Daly & Robinson, 2021). All educators voiced resilience strategies; however, there were notable differences between these two groups in their avenues toward resilience. A greater number of teachers identified coping and adaptation strategies whereas directors were more likely to describe agency and social connection strategies to manage their well-being (Fig. 10.3).

Fig. 10.3 Avenues of resilience employed by early childhood educators



Stress is not a new phenomenon in the ECEC workplace. Educators experience multiple work-related stressors simultaneously throughout the workday (Baumgartner et al., 2009). However, the return-to-work COVID guidelines and global pandemic heightened typical stressors, many of which resulted from decisions at the macrosystem and exosystem (i.e., beyond their control) within the social-ecological framework. In response, teachers identified utilizing coping strategies, emotion-based (e.g., meditation, exercise, eating well) and avoidant-based (e.g., distraction activities such as reading), to manage stressors. This is congruent with previous research by Baumgartner et al. (2009) indicating that educators tend to use emotional and avoidant coping strategies for work-related stress reduction. Educators tend to use these coping strategies, as opposed to problem-focused strategies, because most stressors during their workday are perceived to be beyond their control (Baumgartner et al., 2009). This is problematic as extended use of avoidant coping strategies has been found to be related to burnout and emotional exhaustion (Wagner et al., 2013). It is important to reflect on educator well-being as burnout and emotional exhaustion are linked to low job satisfaction and quitting intentions that contribute to high turnover rates (Carson et al., 2017). High turnover rates impair staff–child connections that serve as a key underlying aspect of process quality, thus negatively impacting childcare quality (OECD, 2018).

In the current study, teachers reported adaptation and accommodation as strategies utilized to manage the additional stressors of the pandemic. Adaptive capacity, preconditions that support the ability to be adaptive, has been explored in disaster studies, which indicate that adaptation is a critical element in disaster recovery (Brown & Westaway, 2011). Adaptability is a characteristic central to the extent to which an individual experiences resilience and therefore maintains/protects well-being during times of duress (Armitage et al., 2012). Teachers returning to their job and adapting new routines into their work structure may have allowed them to refocus their attention away from the uncertainties of COVID. This adaptation and normalization may have provided a sense of familiarity/comfort to enhance their sense of well-being (Brasher, 2001). The process of adapting to find work–life balance has been found to be a positive predictor of well-being among other essential workers (Loretto et al., 2005). It is likely that teachers accessed resilience through adaptation due to their role within the ECEC center as they traditionally have little influence in the exosystem and thus fewer opportunities to exercise agency.

Almost all directors stated agentic feelings while few teachers reported these feelings. This is likely due to the perceived or real ability to exercise a greater amount of agency within the exosystem. A social-cognitive approach to human agency recognizes that intrapersonal, behavioral, and environmental factors interact to determine one's autonomy (Bandura, 2006). Directors discussed the responsibility of decision-making with regard to return-to-work pandemic guidelines and the responsibility of running their ECEC program to support families and colleague's safety as large impacts to their workload. Implicit in these responsibilities is the autonomy to problem-solve and make decisions, highlighting the agency tied to their role. The use of problem-solving in response to stressors is associated with improved well-being and lower perceived stress (Wagner et al., 2013). Given that directors are generally responsible for providing solutions to problems that arise within their program, we found that directors applied a problem-focused approach to cope with the stressors of COVID.

Perceived social support and social connection has a direct influence on well-being (Menéndez-Espina et al., 2019) and positive effects on mental health coping with the COVID pandemic (Dozois, 2021). In the current study, directors were designated as the hub between classroom cohort and educator–family communication as part of COVID mitigation measures to reduce cross-contamination. This increased social connection for directors, which directly enhanced their perceived well-being in response to a shifting pandemic landscape. At the same time, this limited social connection opportunities for teachers, negatively impacted their sense of belonging and feeling valued. Ensuring that all educators have social connection opportunities may act as a safeguard to well-being especially in times of uncertainty.

Strengths and Limitations

A key strength of this work is the focus on the educator perspective as the key informant on interpreting the impact of the COVID pandemic within ECEC programs. The well-being of early childhood educators tends to be invisible and overlooked in research (Cumming et al., 2020). Second, using a qualitative approach enables the voice of the educator to be expressed with depth and nuance. Third, the balance of educator and director perspectives facilitated an exploration of role-specific experiences to be teased apart and contrasted for better understanding of resilience implementation.

A number of limitations must also be acknowledged. These perspectives gathered reflect those of educators in Alberta, Canada, and findings may differ depending on regulator policies and COVID guidelines specific to different jurisdictions. However, the findings in this study align with initial well-being studies reported in different jurisdictions (Bassok et al., 2020).

Second, interviews were conducted in a window of time during the COVID pandemic and these findings do not encompass the full extent, including the

progressions and regressions, of the pandemic. We would infer the distress findings would be amplified during the times when restrictions were at its highest.

Implications and Recommendations

Educator well-being has a direct connection to the quality of care and positive outcomes for children (Cumming et al., 2020; Nislin et al., 2016). We have demonstrated that educators exhibited considerable resilience in response to COVID pandemic stressors. However, the resilience approaches employed by educators were constrained due to job roles and did not include clear opportunities for agency and social connection. Key operators in the ECEC exosystem and mesosystem, such as policy-makers and program directors, might look to improve teacher agency through increased opportunities for decision-making. Similarly, increasing social connection opportunities through in-person or virtual settings may increase sense of belonging, agency, and self-efficacy, all of which contribute to well-being (Cigala et al., 2019).

Recommendations for Future Research

Early childhood educators have encountered a rapidly changing professional practice, heavier cleaning workload, coupled with increased risk of viral exposure. Perhaps not surprisingly, themes of distress were identified in this study. Supporting workforce well-being and resilience is important for child health as well as organizational function. Further research is needed to explore interventions that support educators' resilience.

Conclusion

Key components impacting educator well-being include education level, emotional and financial well-being, along with autonomy in the educator's work (Cassidy et al., 2019). Our results demonstrated that the pandemic and related protocols negatively impacted three of four key well-being components, which provides evidence of a significant impact on the well-being of educators in this sector. Factors that influence educator well-being are foundational to quality early childhood education and the children's well-being (Hall-Kenyon et al., 2014). Supporting educators' resilience with increased focus on agency and social connection may lead to improved job satisfaction and reduced emotional exhaustion, thereby strengthening the resilience of the educational community and supporting children's development.

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Part III
Focus on Families

Chapter 11

Beneficial Parenting According to the “Parenting Pentagon Model”: A Cross-Cultural Study During a Pandemic



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“How are we going to manage?”; “What will the children do today?”; “I cannot see them in front of the television anymore, it is not healthy!” These comments from parents of young children during the COVID-19 lockdown reflect some of the unique and difficult situations parents experienced during the lockdown. Children did not attend their care and education programs and it was not clear how long this state of uncertainty would last.

In this chapter, literature on parenting of young children during normal times and in times of crisis will be reviewed from a cross-cultural perspective. The study presents data portraying parenting behaviors during the March–April 2020 lockdown in five cultures: Bulgaria, Israeli-Arab and Israeli-Jews, Spain, and the United States. The study aims to shed light on aspects of parenting behaviors. Acknowledging parents as the central agents in their children’s development during times of routine and crisis is important. Guiding parents to interpret professional guidelines in accordance with their values, family characteristics, and culture may help them cope efficiently, especially in times of crisis.

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Background

The COVID-19 crisis created worldwide changes in the daily lives of families. It isolated them in their homes with no daycare and schooling and little outside support (Bornstein, 2021). The lockdown created a situation where on top of parents' fear and stress, they had to juggle at-home childcare, household chores, and work, and were challenged with unemployment, financial insecurity, and confinement stresses that impacted family and child well-being (Prime et al., 2020).

Parenting Young Children

Parenthood is a role based on long-term and intensive investment, characterized by commitment, and emotional nurturing (Bornstein, 2015). Parents regard raising their children as one of the most blessed, fulfilling, stressful, and challenging commitments in their lives (Nelson et al., 2014). This chapter focuses on parenting of young children (2–8-year olds).

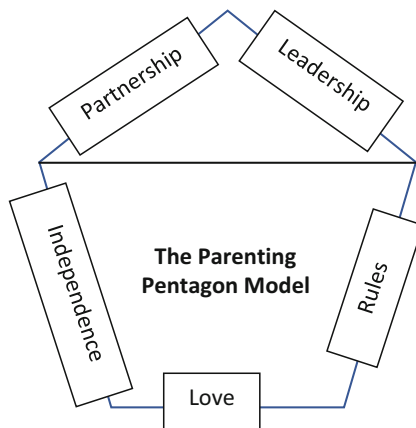
Development during the early years creates the infrastructure for children's effective learning and adaptation to society. Children's achievements and behavioral characteristics largely predict their later ways of dealing with the world (e.g., Ladd & Dinella, 2009). Parents' responsibilities during these years are vast and relate to all aspects of children's well-being: their survival, health, safety, emotional security, standards of living and care, opportunities for play and learning, and freedom of expression (United Nations Committee on the Rights of the Child, 2005).

Studying beneficial parenting, Baumrind (1966) stressed the importance of the ways that parents support and exercise responsiveness and control toward their children. Research in Western countries shows that a parenting style that integrates parental responsiveness and control is beneficial for children's development (e.g., Gauvain et al., 2013). The theoretical foundation for our research is the Parenting Pentagon Model (PPM) (Meoded Karabanov et al., 2021).

The Parenting Pentagon Model (PPM)

The PPM was designed by family therapists and child development researchers (Eitan Aram, Dorit Aram, Orit Bar-Yovel, Michal Torgan Anixter, and Nili Amos Itman). They based it on clinical and empirical findings regarding beneficial parenting behaviors. The model specifies five constructs of behaviors: Partnership between the Caretakers, Parental Leadership, Love Behaviors, Encouraging Independence, and Adherence to Rules (see Fig. 11.1).

Fig. 11.1 The parenting pentagon model



Parents’ behavioral implementation of each construct may differ by culture (Bornstein & Putnick, 2015), yet studies in multiple cultures show that the implementation of each construct is related to children’s development. Together, they present a cohesive picture of parenting within a family.

Partnership

Partnership refers to the collaboration and communication between the child’s main caregivers. It consists of behaviors such as dividing roles, resolving disputes, and presenting a uniform front to the child. Belsky et al. (1996) describe productive co-parenting as the way parents support one another’s parenting efforts on a daily basis. Parents who maintain a high level of partnership show greater responsiveness to their children, which in turn encourages children’s optimal social adjustment (e.g., Petch et al., 2012).

Leadership

Parents should be the leaders of their nuclear family while safely navigating their family throughout the complexities of life. Leadership refers to parental behaviors that determine their home lifestyle, organize and monitor daily activities, gather information, and take responsibility for decisions concerning their children. There is evidence that parents’ tendency to behave and lead their family in a manner that clearly reflects their values promotes autonomous and authentic values in their children (e.g., Yu et al., 2015). For example, parents’ monitoring of and involvement in children’s schooling predicts their children’s achievements (Bellon et al., 2017).

Love

Children have a basic need for love. They must feel that they are wanted, needed, and meaningful to others. Children want to spend time with their parents. Love behaviors refer to parents' affectionate behaviors, including physical and verbal expressions and gestures, and caring behaviors such as listening, sensitivity, encouragement, empathy, shared time, and shared play. Children of parents who express high levels of positive emotions tend to show high levels of social abilities, adaptive skills, social-emotional understanding, and empathy (e.g., Eisenberg et al., 2003). Additionally, frequency of parent-child joint activities predicts preschoolers' achievements (e.g., Bingham et al., 2017).

Independence

The process of children separating from their parents and gaining independence begins at birth. It is a physical and a social-emotional process that should be supported by parents. Encouraging Independence refers to the extent that parents are aware of their children's development and encourage them to perform age-appropriate tasks (e.g., Matte-Gagné et al., 2015). Supporting children's autonomy helps them develop executive functions, emotional regulation, prosocial behaviors, and academic achievement (Dix et al., 2007).

Rules

Children need rules in their daily life because an environment without limits is chaotic and scary. Adherence to Rules refers to the ways that parents create a structured framework of rules and norms at home and apply them with determination and consistency. Effective rules are tailored to the child's development and abilities (Manzeske & Stright, 2009). Parental consistency is positively connected with children's development of normative behaviors, such as sleeping and eating (Jones et al., 2014), and adaptive prosocial behaviors, such as empathy and sharing (Knafo & Plomin, 2006).

The PPM integrates the above-mentioned five constructs of beneficial parenting (see Fig. 11.1). Previous research showed that these constructs represent a coherent view of parents' behaviors, and they relate to aspects of children's well-being including their quality of sleep (Even Tov, 2020) and balanced digital activities (Meoded Karabanov et al., 2021), as well as to parents' well-being (Aram et al., 2019). This model reflects a coherent view of parenting behaviors revealing relative strengths and weaknesses in different cultures and in various situations.

Parenting During a Period of Crisis

Parents’ functioning is a key factor that influences children’s sense of security and coping abilities. There is an association between the attitudes that parents express during stressful situations and the emotional reactions of their children aged 5–7 years (Gatenio-Kalush & Cohen, 2019). Positive parenting in such circumstances can enhance positive interactions between parents and children and enables meeting children’s needs (Wang et al., 2020). Cohen et al. (2014) found that an intervention guiding parents to strengthen their leadership (e.g., planning) and love behaviors (e.g., playful interactions including physical contact) during stressful times had a positive effect on young children’s behaviors, moods, and cooperation with others.

The COVID-19 outbreak introduced changes in the daily lives of families of young children around the world. During the lockdown, the childcare/preschool settings that provide a meaningful developmental framework for children were closed and were partly replaced by digital education (Stites et al. 2021). However, educational experiences could not be fully replaced by online activities and parents had to take the leading role of setting their young children’s everyday experiences. Parents had to address their children’s emotional, social, and educational needs, without the support and physical help of family and friends (Ghebreyesus, 2020). A survey in 27 countries showed that being at home during the lockdown with more than one child was associated with high levels of parental stress (Kowal et al., 2020). Parents with a child under the age of 18, who experienced cumulative stressors (e.g., anxiety or depression), reported that their children’s health and learning declined (Brown et al., 2020).

A Cross-Cultural Perspective of Parenting

Learning about parenting during a crisis in different cultures has descriptive and explanatory values. While the complex and intensive nature of parenthood is perceived as universal, there are aspects that are mediated by cultural context (Harkness & Super, 2002). Culture can be defined as patterns of behaviors acquired through socialization processes (e.g., Boyd & Richerson, 2005). The present chapter presents data regarding parenting during the time of crisis in five cultures.

Bulgarian Parenting

Traditionally, Bulgarian families were more conservative than Northern and Western European families (United Nations Development Programme Bulgaria, 1995). Yet, 50 years of socialist regime in the country has affected the characteristics of

parenting. During this period, the Christian religion and values, traditionally strong for the Bulgarians, were trampled. Bulgarian parenting tended to be collectivist and the family's main values were security, duty, intra-group harmony, hierarchy, cooperation, and emotional dependence. Today, after the advent of democracy, there are two contradictory trends in Bulgarian parenting: On the one hand, a return to traditional values that are characterized by a patriarchal culture, that is, a high degree of adult control and power distance (Andonova, 2018), and on the other hand, a rapid adaptation to Western parenting style (Luleva, 2016).

Israeli-Arab Parenting

Generally, family values of Israeli-Arab parents are collectivistic and are characterized by traditional patriarchal and authoritarian approaches. Extended families often live close to each other and interact daily (Kaufman et al., 2012). There is an emphasis on obedience and adherence to behavioral patterns that advance the harmony of the collective (Dwairy & Achoui, 2006). In the past three decades, however, Arab society in Israel has been going through modernization processes (Agbaria, 2020). Today, Israeli-Arabs are concerned with preserving Arab family culture, while also integrating Western influences (Lavee & Katz, 2003). Consequently, traditional parenting has undergone changes, expressed by less conformity to traditional views (Shechory-Bitton et al., 2015).

Israeli-Jewish Parenting

Traditional Israeli-Jewish norms focus on the centrality of the family and of children within the family (e.g., Oryan, 2014). Israeli-Jewish mothers believe that their efforts in child-rearing are an obligation to society and a means to accomplish self-fulfillment (Doron, 2003). Extended family relationships are based on interdependence and mutual care (Samoocha, 2005). Despite international influences, the family is a relatively stable institution, more than in most Western countries (Scharf, 2014). At the same time, the majority of Israeli-Jewish society holds Western, individualistic family values (Beystrov, 2012; Samoocha, 2005). Parents tend to give freedom to their children (Dwairy & Achoui, 2006). They show little authority and provide few rules and restrictions (Chen et al., 2014).

Spanish Parenting

Spanish culture has been characterized as horizontal collectivist, where parents understand the individual self as part of the family self and emphasize the use of affection and involvement in children's socialization (García & Gracia, 2009; García

et al., 2019; Gouveia et al., 2003). Moreover, Spanish families are oriented toward the satisfaction of children’s emotional needs. However, parenting is particularly concerned with safety and multiple forms of control are considered necessary for children’s well-being (Gómez Espino, 2012). The role of education is crucial for Spanish families as the central means for optimizing children’s future possibilities (Gómez Espino, 2012). Parents’ concern about the possibility of their children failing in school and, as a consequence, falling victim to economic precariousness is an important motive for exercising intensive parenting (Gil Calvo, 2009).

US Parenting

Most of the research on US parents comes from middle-income or White parents. These parents support individualistic values (Bornstein et al., 1998). They value their children’s self-expression and, accordingly, encourage them to pursue personal goals and interests (Mayseless & Scharf, 2003). American mothers are competitive, and they are likely to adopt an intensive parenting approach by investing a lot of energy in the upbringing of their children (Bornstein et al., 1998). This is known as concerted cultivation (Sonnenschein et al., 2016). Parents often acknowledge the importance of their educational input to their children’s development (Rodriguez & Olswang, 2003) and set boundaries for their children and establish consequences to maintain family order (Oryan, 2014).

Purposes of the Study

The COVID-19 outbreak created a worldwide situation that facilitated studying parenting of young children during stressful times from a cross-cultural perspective. The data for this study were collected during the March–May 2020 lockdowns. In-class schooling was terminated, and parents had to take care of their children. There was fear and lack of knowledge regarding the severity of the epidemic; people were quarantined, hospitalized, and there were daily international reports regarding the mortality rates. It was not clear how long this state would last.

The aim of the study was to cross-culturally explore parenting of young children in line with the PPM, during this stressful time. We do not statistically compare the cultures but explore them separately. Our research questions were: (1) What are the characteristics of parenting behaviors (the PPM constructs) during a crisis time in each of the five cultures? (2) What are the relative strengths and the challenges of parents within the cultures? (3) What are the relations between the family’s background measures (child’s age, number of children, parent’s age, and education) and the PPM constructs.

Method

The research questions were examined via a quantitative study. Although this is not a comparative study, this design enabled us to use a cross-cultural view of parenting behaviors. Also, these data can be used for future research to compare behaviors in more routine times.

Participants

Participants were 1080 parents (153 Bulgarian, 192 Israeli-Arabs, 290 Israeli-Jews, 304 Spanish, and 141 American). In each group, the family had at least one 2–8-year-old child to whom they referred in our study. The majority of the parents (93%) were mothers (1001 mothers and 79 fathers) from a middle socio-economic background. Parents' mean age was 36.67 years (standard deviation [SD] = 5.18). Parents' education ranged from primary school diploma (2%) to PhD (7%). Most of the parents (77.70%) had at least a BA degree (90.20%, 58.90%, 88.30%, 67.10%, 89.90%, and 77.60% for Bulgaria, Israeli-Arabs, Israeli-Jews, Spain, and the United States, respectively). Their participating children were 50.30% boys and 49.70% girls. Children's mean age was 60.89 months (SD = 18.91, range 2–8 years). The mean number of children per family was 2.33 (SD = 1.06). Family's organization was typically nuclear and they lived in suburban-to-urban middle-class settings. Table 11.1 details these demographic characteristics in each culture.

Table 11.1 Demographic characteristics of the sample by culture ($N = 1080$)

	Child's age ^a : Mean (SD)	Parent's age: Mean (SD)	Number of children: Mean (SD)	Girls ^b (%)	Mothers ^c (%)
Bulgaria ($n = 153$)	61.77 (19.49)	35.91 (5.15)	1.64 (0.61)	54.2	94.8
Israeli-Arabs ($n = 192$)	57.49 (17.14)	33.19 (5.50)	3.31 (1.63)	45.3	94.8
Israeli-Jews ($n = 290$)	56.65 (18.17)	37.58 (4.95)	2.70 (1.21)	49.3	93.8
Spain ($n = 304$)	61.38 (20.31)	38.66 (4.57)	1.85 (0.80)	50.3	87.5
United States ($n = 141$)	67.16 (19.4)	38.01 (5.73)	2.16 (1.04)	50.3	96.6

SD standard deviation

^aIn months

^bThe rest are boys

^cThe rest are fathers

Measurement Instruments and Procedures

Parental Daily Behaviors Questionnaire

The study utilized a self-report online questionnaire, built to characterize parenting behaviors according to each of the five-PPM constructs. Parents were asked to refer to one of their children (aged 2–8 years) and report the frequency of their behaviors on a scale of “1” = never to “6” = always during the current times.

The questionnaire was anonymous and included 38 items. The items referred to each of the five constructs as follows:

1. *Partnership*. Ten items described parents’ daily collaboration behaviors, for example: “I back up my partner in her/his reactions to our child” and “My partner and I discuss issues relating to our parenting.”
2. *Leadership*. Eight items described daily behaviors that emphasize the parents’ role as the family leaders who organize family life and set an example for their children, for example: “I behave according to my goals as a parent” and “I plan my parenting behaviors (e.g., I prepare for toilet training).”
3. *Love*. Ten items described daily physical and verbal expressions of love, sensitivity, and empathy toward the child, for example: “I hug, kiss, and hold my child” and “I do small actions that will make my child happy (e.g., prepare food that he/she loves).”
4. *Independence*. Five items described encouraging the child to independently perform tasks that match his/her abilities, for example: “I encourage my child to be independent in his/her day-to-day activities (e.g., dress, shower)” and “When my child asks me for help, I first suggest that he tries on his/her own.”
5. *Rules*. Five items described parents’ daily adherence to the home rules and routines, for example: “I make sure that my child behaves according to the rules I set.” The average score of each construct’s items constituted its score. Higher scores indicated more beneficial parenting.

Fifteen Jewish and Arab MA educational counseling students who learned the PPM model assessed the content validity of the questionnaire. A Confirmatory Factor Analysis assured the overall fit of the PPM model (Meoded Karabanov et al., 2021). Reliabilities among items for Partnership, Leadership, Love, Independence, and the Rules constructs were Cronbach’s $\alpha = 0.87$, $\alpha = 0.80$, $\alpha = 0.92$, $\alpha = 0.79$, and $\alpha = 0.80$, respectively. The overall reliability of the PPM index was $\alpha = 0.95$.

Participants also completed a demographic questionnaire. We requested information on child’s gender and age, birth order of participating child and number of children in the family, living area, religious affiliation, parents’ education level, and child’s educational setting.

The Hebrew questionnaires were translated back and forth to each of the other languages (Arabic, Bulgarian, English, and Spanish) by native speakers of both languages (e.g., Hebrew and Arabic; Hebrew and Spanish). The study received the

approval of the Ethics Committee of Tel Aviv University, University of Maryland Baltimore County, and other institutions where it was required. The researchers distributed these anonymous self-report questionnaires through social media in each of the participating countries during March–May 2020. The parents first read information about the study and then indicated their consent to participate by continuing with the survey.

Data Analysis

First, an average score for each construct was calculated. We then computed descriptive data for the PPM constructs within each country, followed by a series of ANOVA analyses learning about the differences between the constructs in each culture. Thereafter, we calculated the correlations between the family's background measures (child's age, number of children in the family, and the responding parent's education) and the PPM constructs. Last, we ran General Linear Model (GLM) analyses in each group, comparing the PPM constructs while controlling for the family's background measures.

Results

We first present each of the PPM constructs and the differences between them in each culture. Next, we display the correlations between the family's background measures (child's age, number of children, parent's age, and education) and the PPM constructs.

Table 11.2 presents the PPM descriptive statistics in each culture. Generally, parents' self-reports on the five constructs were high. Table 11.2 shows that among the PPM measures, the highest scores across the five cultures are in the Love construct. Parents reported frequent expressions of love toward their children (e.g.,

Table 11.2 Descriptive statistics: means and standard deviations of the PPM measures ($N = 1080$)^a

	Bulgaria	Israeli-Arabs	Israeli-Jews	Spain	United States
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Partnership	4.79 (0.88)	4.81 (0.71)	4.35 (0.75)	4.99 (0.66)	4.89 (0.57)
Leadership	4.96 (0.62)	5.19 (0.52)	4.61 (0.57)	5.15 (0.37)	5.13 (0.37)
Love	5.55 (0.54)	5.55 (0.49)	4.94 (0.66)	5.66 (0.37)	5.63 (0.35)
Independence	5.11 (0.68)	4.91 (0.64)	4.43 (0.60)	5.17 (0.49)	5.16 (0.40)
Rules	4.93 (0.75)	4.86 (0.65)	4.38 (0.63)	5.16 (0.47)	5.07 (0.45)

M mean, *SD* standard deviation

^aPossible ranges: 1 to 6

empathy, shared parent–child time). Also, Partnership between the parents (e.g., agreement regarding children’s activities, task division) is relatively lower than the other constructs in each culture.

We used an ANOVA to examine the differences between the five parenting constructs in each culture. The findings reveal significant differences between the five parenting constructs in all five cultures: Bulgarian ($F(4, 149) = 57.46, p = .00, \eta^2 = .61$); Israeli-Arabs ($F(4, 188) = 111.96, p = .00, \eta^2 = .70$); Israeli-Jews ($F(4, 286) = 103.40, p = .00, \eta^2 = .59$); Spanish ($F(4, 294) = 149.71, p = .00, \eta^2 = .67$); and American ($F(4, 136) = 106.15, p = .00, \eta^2 = .76$). Bonferroni post-hoc tests explored the significant differences between the constructs in each culture (see Fig. 11.2).

Within the Bulgarian group, Love was significantly higher than the other constructs ($p = .000$ for all the comparisons). Independence was significantly lower than Love ($p = .000$) but significantly higher than Partnership ($p = .000$), Leadership ($p = .025$), and Rules ($p = .023$). We found no significant differences between Partnership and Leadership and Partnership and Rules.

As for the Israeli-Arab group, the Love construct was significantly higher than the rest of the constructs ($p = .000$ for all the comparisons). Leadership was significantly lower than Love ($p = .000$) and higher than Partnership, Independence, and Rules ($p = .000$ for all the comparisons), with no significant differences among them.

A similar pattern was found in the Israeli-Jewish group. Love construct was significantly higher than the rest of the constructs ($p = .000$ for all the comparisons). Leadership was significantly lower than Love ($p = .000$) and higher than Partnership, Independence, and Rules ($p = .000$ for all the comparisons), with no significant differences among them.

In the Spanish group, Love was significantly higher than the rest of the constructs ($p = .000$ for all the comparisons). Partnership was significantly lower than the rest of the constructs ($p = .000$ for all the comparisons). There were no significant differences among the Leadership, Independence, and Rules constructs.

A similar pattern was found in the US group. Love was significantly higher than the rest of the constructs ($p = .000$ for all the comparisons). Partnership was significantly lower than the rest of the constructs ($p = .000$ for all the comparisons). There were no significant differences among the Leadership, Independence, and Rules constructs.

We calculated the correlations between the family’s background measures (child’s age, number of children, parent’s age, and education) and the PPM constructs in each of the groups. We found some significant correlations. Interestingly, they look somewhat alike across cultures.

Parent’s age correlated negatively with some of the PPM constructs in the Bulgarian (Love: $r = -.21, p = .01$; Rules: $r = -.16, p = .05$); Israeli-Jews (Partnership: $r = -.28, p = .00$; Leadership: $r = -.16, p = .01$; Love: $r = -.18, p = .00$; Independence: $r = -.12, p = .05$; Rules: $r = -.14, p = .02$); Spanish (Love: $r = -.14, p = .01$); and the US groups (Rules: $r = -.23, p = .01$). Generally, during the COVID-19 first lockdown, older parents reported less beneficial parenting behaviors.

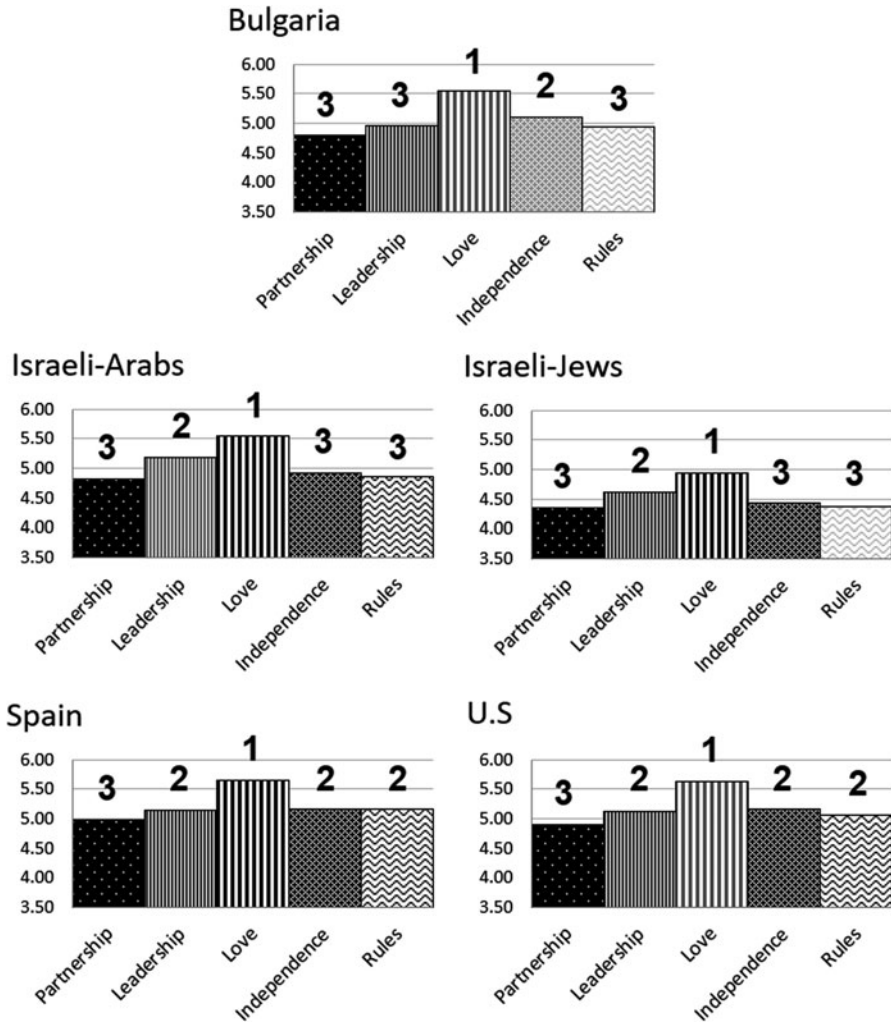


Fig. 11.2 Means of the PPM constructs in the five cultures. (Note. The numbers within the columns represent the significant differences between constructs)

Number of children in the family correlated negatively with Love in the Bulgarian ($r = -.19, p = .02$), Israeli-Arab ($r = -.16, p = .02$), Israeli-Jews ($r = -.11, p = .05$), and Spanish groups ($r = -.30, p = .00$). Parents of larger families tended to report fewer Love behaviors. In Spain, parents with more children reported giving more independence to their children ($r = .14, p = .01$).

Children’s age correlated positively with Independence in the Israeli-Jewish ($r = .15, p = .02$), Spanish ($r = .21, p = .00$), and the US ($r = .18, p = .03$) groups. Parents of older children reported that they gave their children more independence during the lockdown.

Last, parents’ education level correlated positively with Independence in the Bulgarian group ($r = .18, p = .03$). More educated parents reported that they gave their children more independence and responsibilities. Parents’ education level correlated negatively with Rules in the US group ($r = -.22, p = .01$). More highly educated parents reported that they set fewer rules at home during the lockdown.

Acknowledging these correlations, we ran General Linear Model (GLM) analyses in each group, comparing the PPM constructs while controlling for the family’s background measures. These analyses revealed the same picture as the one described above. Hence, we do not present them. Thus, the background measures are related to parents’ reported behaviors, yet they do not change the balance between the five parenting constructs within each culture.

Discussion

The aim of this chapter was to describe, from a cross-cultural perspective, parents’ behaviors toward their young children during the first COVID-19 lockdown in March–May 2020. We utilized the Parenting Pentagon Model (PPM) to study different aspects of parents’ behavior. The PPM addresses five beneficial general parenting behaviors: Partnership between the main caretakers; Leadership of the parent in managing the family’s life; Love behaviors toward the children; encouraging children’s Independence; and Adhering to Rules within the daily routines. The COVID-19 crisis affected families across the world and children’s vulnerability increased (Cluver et al., 2020). We studied parents in Bulgaria, Israeli-Arabs, Israeli-Jews, Spain, and the United States. The results show that the PPM is an effective model for learning about parenting behaviors across cultures. Most studies on parenting distinguish between two main sequences by which parental style is characterized: support and control (Aunola & Nurmi, 2005). The PPM aims to portray a more detailed description of parental conduct. The five constructs present a coherent picture of parents’ behavior in the family that can help educators and therapists focus their attention on guidance adapted to the parents’ needs.

We did not statistically compare the five groups because we wanted to portray parenting, including the relative strengths and weaknesses, within each culture, while recognizing the shared challenging context of the pandemic. Exploring the relative strength of parenting behavior constructs in each culture showed some general cross-cultural and some specific parenting patterns. Looking at the pattern of parenting behaviors during the COVID-19 lockdown concerning each construct of the PPM, we see similarities and differences across cultures. Interestingly, the description of parents’ behaviors in each culture remained the same after controlling for the family’s background measures (child’s age, number of children, parent’s age, and education).

Cross-Cultural Similarity in Parenting Behaviors

Love

Parents gave the highest ratings on the Love construct in each of the five cultures. That is, they reported that they frequently expressed their love to their child by hugging, showing empathy, and more. Emotional support is essential in stressful situations in which parents are the only significant adults who are continuously present in their children's lives (Cohen et al., 2014). Parents perceive expressions of love as a major part of being a good parent, both during routine (e.g., Lawton, & Coleman, 1983) and crises such as wars (Ames et al., 2011).

It seems that regardless of cultural background, parents recognized that expressions of love are central to their parenting role during the COVID-19 lockdown. Interestingly, there is evidence that mothers' compassionate love for their children is associated with activation of the parasympathetic nervous system that calms the mothers themselves (Miller et al., 2015). We suggest that beyond showing love to support their children, expressing love (e.g., giving hugs) toward their children may also be a way for the parents to calm themselves during the lockdown.

Partnership

In all five cultures, parents gave the lowest ratings on items on the Partnership construct. That is, they reported that they did not tend to consult with their partner, did not share daily chores regarding the children or present a uniform front to the children, and more. In Spain and the United States, this construct was significantly lower than all the other four constructs. The overall relatively low ratings on Partnership were somewhat unexpected. During the lockdown both parents often stayed at home. One could expect that in these circumstances, parents would share the heavy burden related to childcare, when no schooling or support from relatives were available. In attempting to explain this finding, we note that most of the participants in our study were mothers. A national survey in the United States showed that mothers spent on average 6.2 h daily on interactive activities with children, compared to an average of 3 h among fathers (Villadsen et al., 2020). Reports from the United States (Evans et al., 2020) showed that couples' coping as partners decreased under the pandemic stress, resulting in increased rates of conflict. Our study supports this idea as parents from all cultures reported lower scores with regard to collaboration with their spouses (Partnership construct).

Mothers across cultures often carry more of the burden of raising children and fathers usually work more hours outside the home (Landivar et al., 2020). This division of labor serves as a "cover story" that helps in justifying, and perhaps obscuring, the traditional role that mothers take upon themselves. Yet, when both parents were at home the imbalance was evident and its justification was disrupted, thus, leading to tensions in the partnership. The lockdown seems to have sharpened

the “traditional” role division, according to which mothers raise the children and fathers are the breadwinners. Researchers report evidence of more stress between parents during the lockdown (Prime et al., 2020). It is also possible that the increased, stressful time that parents spent together at home created and/or intensified tensions between them that were transferred to their parenting behaviors.

Cultural Variations in Parenting Behaviors

Bulgaria Culture

For Bulgarian participants in the study, the Independence construct was prominent. This may be explained by Bulgarian cultural values and norms that were manifested and perhaps strengthened during the lockdown. For example, in line with the collectivist value of duty, Bulgarian parents communicate to their children from an early age that they need to “cope with life on their own” (United Nations Development Programme Bulgaria, 1995). Bulgarian children are young (around 10 years old) when they first start going to school by themselves, and many children are required to participate in household chores. This mentality may have formed during the communist era when children would go on month-long excursions with their schools and were expected to be fairly independent. These values still guide parents in child-rearing and may have intensified when there was no schooling. Another possible culturally related explanation might be that the norm of people’s mistrust in government institutions resulted in an emphasis on “trusting nobody but yourself” (Andonova, 2018).

Israeli Arab and Jewish Culture

For Israeli Arab and Jewish participants in the study, parents’ Leadership was noticeably higher than Partnership, Independence, and Rules. The centrality of Leadership in parents’ reports seems to reflect taking responsibility for monitoring the family’s changing needs. Recognizing the existential nature of the pandemic’s challenges, researchers have suggested that parents’ reflection on their values and constructs can significantly assist them in leading the challenging family processes during this irregular time (Fraenkel & Cho, 2020). In Israel, familism is a mark of the society. The family codes are anchored in each religion and are present in everyday lives (Fogiel-Bijaoui & Rutlinger-Reiner, 2013). Our findings suggest that during the lockdown, Israeli parents (Arabs and Jews) connected to their classic family values and hence reported leadership behaviors. It is possible that revisiting traditional behaviors helped them manage the family during the challenging time.

Spanish Culture

For participants from Spain, Partnership was the lowest construct in parents' reports and was significantly lower than the rest of the constructs. Spanish mothers are usually the ones who make sure that the schedule is followed and manage the household routine (Mínguez, 2010). Our study strengthens a report showing that during the COVID-19 pandemic, Spanish mothers who were already the main caretakers of household chores and parenting continued to do so to a considerably higher degree, despite the increase in men's participation (Farré & González, 2020).

US Culture

For the US participants in the study, Partnership was also the lowest-rated construct. This finding may be explained by US mothers' perception of motherhood. Pre-pandemic research found that many US mothers held themselves to the standards of "intensive" parenting (e.g., Milkie et al., 2019) and regard this as a personal achievement (Bornstein et al., 1998), while struggling to balance parenting and paid work (Christopher, 2012). When in-school classes were canceled or virtual, it put considerable pressure on parents. Instead of creating a real partnership with their partner, mothers felt guilty for working from home and not spending enough time with their children (Barnett & Jung, 2021). For mothers, parenting during the lockdown was extremely frustrating and demanding (Calarco et al., 2020).

Family Background Measures and Parenting Behaviors

We found some cross-cultural, significant correlations between the background measures and the PPM constructs. Mainly, parents' age correlated negatively with beneficial parenting behaviors, number of children in the family correlated negatively with the Love construct, and children's age correlated positively with Independence.

Parents' Age and Parenting Behaviors

Parents' age negatively correlated with beneficial parenting behaviors. Older parents within our sample reported lower application of the PPM constructs. This finding may be explained by parents' career stage. During the pandemic outbreak, younger parents (20–30) were more often on leave from work (due to the epidemic) while those in their late thirties dealt with both career and parenting (Henehan, 2021). Older parents (mostly mothers) in our study were in a more advanced and demanding stage in their career, hence busier and less available. Juggling between home and

work may have been more challenging for them, resulting in reports of less beneficial parenting. Another possible explanation may relate to an additional stress of older parents, namely, caring for and worrying about their own elderly parents, who were more likely to be affected by the pandemic (Harapan et al., 2020).

Number of Children at Home and Parents’ Love

Regardless of family size, the number of children in the family correlated negatively with the Love construct. Parents who have more children reported fewer love behaviors. Previous evidence suggests that the number of children in the family is negatively related to parental involvement in their children’s education (e.g., Vellymalay, 2013). During the COVID-19 outbreak, couples with no children reported higher levels of dyadic adjustment than couples with children. The parenting burden during the lockdown decreased parents’ well-being and affected their relationship, and this frustration may have spilled over into their relations with their children (Lemish & Elias, 2020). These findings can also suggest that parents with more children dealt with more schooling demands. Parents had to help their school-aged children with different programs, requirements, and assignments. This may have added to parents’ fatigue and economic or emotional pressures, thus resulting in fewer loving behaviors.

Children’s Age and Parents’ Encouragement of Children’s Independence

Children’s age correlated positively with the Independence construct. Parents whose children were at the older end of the 2–8-year range reported that they encouraged more independence. Parental support for autonomy represents parenting practices that encourage, recognize, and respect children’s perspectives and individuality (Grolnick, 2003). During the lockdown, parents’ challenge of working and also caring for children may have intensified the need for more child independence. Relatively to toddlers, older children could manage themselves better so parents could provide them with more independence (Matte-Gagné et al., 2015).

Summary, Strengths, Implications, and Recommendations for Research and Practice

In this study, we assessed parents’ reports of their behavior during the COVID-19 outbreak in five cultures in Eastern and Western Europe, the Middle East, and the United States. Findings presented a comprehensive view of parenting of young children and demonstrated cultural similarities and differences. Parents reported Love behaviors as the most prominent, expressing the recognition of its centrality

in parenting, regardless of culture. Partnership behaviors were reported as least frequent in all cultures, suggesting that collaboration between spouses was most challenging for parents. Additionally, coping with the lockdown circumstances was more challenging in larger families and for older parents. During this time parents tended to encourage independence of older children.

The strength of this study lies in its wide view of parenting within cultures and across cultures. The picture that it presents can aid in supporting parents' coping skills, for the benefit of their family members. Acknowledging parents as the central agents in their children's lives during times of crisis can empower them. It can encourage them to be aware of their major role in their children's life and manage a supportive child center routine during this continuing stressful situation. It also can encourage parents to be aware of behaviors that need strengthening in the family.

The findings encourage additional cross-cultural research on parenting behaviors during such periods. Studies should use interviews in addition to questionnaires to deepen our understanding of both universal and cultural aspects of parenting. Also, as this study was based on self-reports, observation-based research can be added to understand how parent statements are manifested in behaviors. An additional limitation is that the families were mainly middle-class. Future studies should include a broader range of participants in different cultures.

Finally, the similarities and differences across cultures have implications for understanding and guiding parents during stressful times. They highlight the possibility of international programs based on PPM that address universal issues and are also adaptable to diverse cultures and languages. The COVID-19 pandemic has enhanced fruitful global collaborations for coping with its worldwide negative impacts, mainly medical. This process should continue and expand to additional domains. Cross-cultural professional collaborations in planning guidance and support programs for parents can promote more egalitarian, culturally sensitive support for parents worldwide and benefit children globally.

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Chapter 12

Early Identification of Risk, Developmental Delay, or Disability in Young Children: Connecting Families with Services During a Global Health Crisis



Marisa Macy 

Not all countries experienced the COVID-19 pandemic the same. The impact of the health crisis was unequal (Bottan et al., 2020; Centers for Disease Control and Prevention, 2020; Dellagnelo & Fernando, 2020; End Violence Against Children, 2020; Phelps & Sperry, 2020; Samuelsson et al., 2020; UNESCO, UNICEF, & World Bank, 2020; World Bank, 2020a). However, throughout the world, childcare and education for young children were disrupted, halted, or indefinitely discontinued during the health crisis (UNICEF, 2020a, b, c; United Nations Children’s Fund, 2020).

Lockdowns worldwide caused hardships for many (Brom et al., 2020; Waite et al., 2020). The isolation and loneliness caused by the lockdowns caused many people to experience mental health problems (Duan et al., 2020; Liu et al., 2021; Loades et al., 2020; Waite et al., 2020). Physical health of children and their families was also compromised with possibly more sedentary lifestyles, eating differently, and overall lifestyle changes (Nagata et al., 2020). Another tragic outcome of the quarantines and lockdowns was the academic loss suffered by children when schools worldwide closed indefinitely (Donnelly & Patrinos, 2021; Egan et al., 2021; Giannini, 2020; Hanushek & Woessmann, 2020; UNESCO, 2021).

The global pandemic has created barriers for locating infants, toddlers, and preschoolers with special needs. Identifying young children in need of and eligible for special services needed for their delay or disability posed a particular challenge worldwide during the COVID-19 health crisis. Services may include, but are not limited to, those falling in one or more of these sectors: education, health, and/or social. Each child and family has a variety of needs that are unique to that child. For

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example, a child with a speech delay may need language and speech services to address their delay and work on interventions to ameliorate the delay.

In countries around the world, locating and connecting children who are eligible for special services due to a delay, risk, or disability is problematic (Cuomo et al., 2019; Reimers, 2022). Policies to guide and inform practice were created in response to the global health crisis (American Academy of Pediatrics, 2021; Centers for Medicare & Medicaid Services, 2020; U.S. Department of Education, 2020; World Bank, 2020b).

First, people who may be eligible for specialized services are not being located effectively in the early years (Center for Health Care Strategies, 2020a; Rosenberg et al., 2013). For example, an estimated 15–17% of children have a developmental disability (Boyle et al., 2011; U.S. Public Health Service, Report of the Surgeon General’s Conference on Children’s Mental Health, 2000). Yet, in the United States, only approximately 2–3% of US infants and toddlers with developmental disabilities receive early intervention (EI) under Part C of Individuals with Disabilities Education Act (IDEA), and 5–6% of preschool children receive early childhood special education (ECSE) under Part B, Section 619 of IDEA (IDEAdata.org).

One way to conduct early detection of risk, delay, and/or disability is to use developmental and/or behavioral screening assessment. In Europe, developmental screening has a model that is being used in other parts of the world (García-Primo et al., 2014). Later in childhood, the percentage of children who qualify and receive special education at school-age (i.e., Kindergarten to grade 12) doubles to approximately 10–12% for children 6 years and above. Early detection systems are likely to miss children in the early years at alarming numbers (Macy et al., 2014; Nations Children’s Fund, 2020; Yoshikawa et al., 2020).

Globally speaking, most young children do not have health insurance or a consistent healthcare provider (e.g., medical homes) where a pediatrician might notice concerns related to their development (Adams et al., 2013; Marks et al., 2009). Young children, birth to 5 years, have no universal setting, like public school K-12 classrooms, where an educator might notice concerns related to development (Bricker et al., 2013). Children are in a variety of settings. Some young children may be in group or education-based programs. Some young children may spend time at home with their parents/families, or in a combination of settings. It is challenging trying to find all the eligible children who might qualify for any of the support services in their communities and, in some instances, there is little to nothing available.

If children with potential learning problems are missing from early childhood programs, it may be partially attributable to the ineffectiveness of the local community’s early detection system (Bricker et al., 2013; Sheldrike et al., 2011). In the United States, only 30% of children nationwide receive screening and/or developmental surveillance services (Hirai et al., 2018). States range from screening 17–59% of children in their state. Hirai and her colleagues found that factors that reduce screening rates are ethnicity, income, and parental education. Even in a

Fig. 12.1 Major obstacles resulting from global pandemic to identifying children's special needs and providing support services



country that has an array of services, children from the following backgrounds are more likely to have difficulty accessing services: (1) culturally and linguistically diverse (Williams et al., 2013), (2) low socio-economic status (SES) (Williams et al., 2013), (3) rural settings (Grant & Isakson, 2013), and (4) uninsured (Shapiro & Derrington, 2004).

In addition to accessing services, there is a problem with timely delivery of services. In a large-scale national and longitudinal study in the United States, researchers found that it took almost a year from when families first recognized a concern with their child and the development of an individualized service plan (Bailey Jr. et al., 1998, 2003; Spiker et al., 2000). Figure 12.1 shows major obstacles to identifying children and providing support services.

Second, early detection efforts are often a hodgepodge of services with inconsistent efforts across programs to locate eligible children. Multiple people from diverse areas of expertise may interact with families (Dreu et al., 2012), which could lead to confusion for parents and caregivers. Parents may work with professionals from education, healthcare, social work, and more during early identification experiences. All these disciplines have their own disciplinary recommended practices, technical terms, and guidelines that they are required to follow.

In the healthcare sector, the percentage of pediatricians “who self-reported always/almost always using one or more screening tools” has significantly increased from 23.0% to 47.7% from 2002 to 2009 (Radecki et al., 2011). However, this also suggests that about half of pediatricians are still not routinely using standardized developmental-behavioral screening tools (Sand et al., 2005; Marks & LaRosa, 2012; Marks et al., 2013) even though it is recommended by the American Academy of Pediatrics (2006). A recommendation is not the same as a legal mandate.

Variability exists with the frequency with which early detection activities are conducted (Bricker et al., 2013; Marks et al., 2011). Some communities have no system of early identification, others offer services once or twice a year, and still others provide frequent regular and ongoing services. Within the United States, no uniform or standard approach is used, and the situation is even more variable, internationally speaking.

The Child Find System in the United States

In the United States, the Child Find system aims to locate children who may be eligible for specialized services to meet developmental needs of young children that are put forth under the landmark law called the Individuals with Disabilities Education Act (IDEA). The law has been in existence since 1975 when Public Law 94–142, the Education for All Handicapped Children’s Act, was passed by the Congress. The intent of IDEA Child Find is to design and implement a system that will locate people with disabilities from birth to adulthood. In English, the word “find” (as in Child Find) could indicate something is lost. However, the meaning of loss is not the case with IDEA Child Find. The children are not lost; rather, their needs are identified early when interventions tend to be more effective. Nevertheless, children may be overlooked in some areas if they live in a community with limited early comprehensive identification resources. Others live in a community where early identification systems struggle to address parental language or literacy barriers.

A myriad of possible challenges is faced by families during the earliest encounter with the IDEA service delivery system. Family challenges may include, but are not limited to, such issues as incomplete referral process, unknown or unclear information about the early identification system, limited or interrupted access to services, recognition of delay/disability, and refusal of screening assessment (Bricker et al., 2013; Glascoe, 1997; Guerrero et al., 2011; King et al., 2010). Families may need supports navigating the complex early identification system (Lipkin et al., 2020; Squires et al., 2013; Turnbull et al., 2007).

Early identification of young children with special needs may present a particular challenge during the years before a child enters formal schooling because infants, toddlers, and preschoolers do not have a universal setting where it might be easier to identify atypical child development. In Italian the word “trovare” means “to find” but may hold a more nuanced meaning than the English equivalent. *Trovare* can also mean to be, be seen, and discover. The *trovare* spirit is consistent with the goals of early intervention: the hope is that children and their families will have opportunities to “be seen” and then linked with the support services that they need.

Trova bambini is seeing children. When we see children, we notice what they need and can identify their special needs (Kostelnik et al., 2015; Lynch & Hanson, 2011; Macy et al., 2014). To locate young children at risk of academic failure, with developmental delays, and/or with disabilities, it is critical to start with their family (Bronfenbrenner, 1979; Bruder & Dunst, 2015; Smith et al., 2010). Parents may struggle to access and navigate services for their child (Bricker et al., 2013; Cox et al., 2010; Feil et al., 1998; Holland & Merrell, 1998; McWilliam, 2005; Smith & Clegg, 2021). Families and professionals throughout the world experience several problems with the early identification of childhood risk, delay, or disability. Matheis and Matson (2015) examined screening refusal rates. They found that females in their study were more likely to refuse screening than males. African American families were least likely to refuse screening. Parent(s) were more at risk for refusing screening for autism spectrum disorder (ASD) if they received a previous diagnosis

of Down's syndrome, seizure disorders, or other genetic disorder. If the family had a history of ASD they were less likely to refuse screening. Referrals are an important time for families because they will lead to identifying services for their child (Marks & Glascoe, 2010; Rydz et al., 2006; Shapiro & Derrington, 2004).

Many challenges existed with locating community-based services for young children and their families before the pandemic (Bricker et al., 2013; Nelson et al., 2011). The pandemic has not alleviated barriers for children and their families to connect with vital services needed to ameliorate risk, delay, or disability. Locating children who need early childhood services is difficult with children experiencing quarantine and social distancing due to the global pandemic resulting from COVID-19. The next section will examine alternatives to face-to-face assessment designed for early identification of risk, delay, or disability.

Connecting Children with Services During Health Crisis

Connecting children with services is a critical concern anytime, but especially during the worldwide pandemic (UNICEF, 2020a, b, c). Researchers are learning that parents face many challenges with quarantine situations and stay-at-home orders during the pandemic (Neece et al., 2020; Redquest et al., 2021; Yoshikawa et al., 2020). For example, young children may not have access to face-to-face assessments. Therefore, professionals and families collaborate to seek alternatives for in-person assessment aimed at early identification of risk, delay, or disability such as: (i) customize family engagement to find what families prefer when it comes to seeking alternative to in-person assessment; (ii) plan the assessment experience based on their preferences and needs for access to early identification services; and (iii) seek congruency between what the families desire and their actual experiences with connecting to services, as shown in Fig. 12.2.

Congruent expectations can serve as the basis for an effective collaboration with families of young children who are concerned about their child. Family-friendly assessments start with positive rapport and effective communication (Glascoe, 2006). Parent-completed screening tools can be used for early detection of special needs (Macy, 2012). Alternatives to in-person assessments will be discussed next that use parent-completed screening assessment for early identification of children's risk, delay, or disability during the global pandemic.

Alternatives to In-Person Assessments

The primary purpose of a developmental-behavioral screening is to make a recommendation of whether or not a further, more comprehensive evaluation is warranted (Bricker et al., 2013; Dworkin & Garg, 2019). Screenings are norm-referenced and show how a child compares to a normative sample. For example, a quick assessment

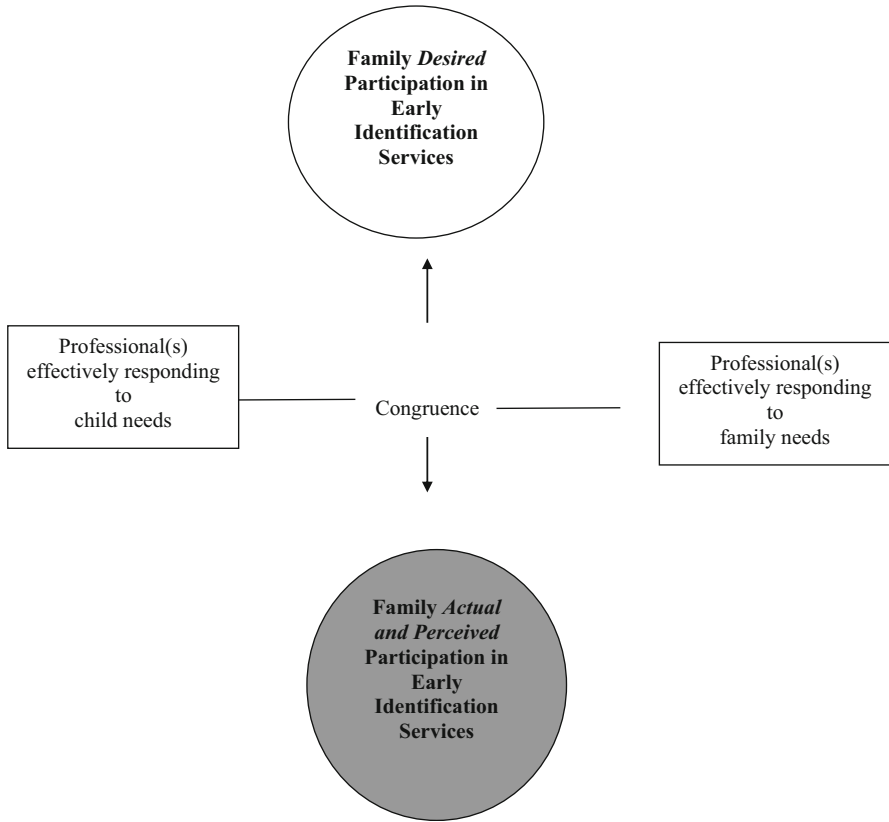


Fig. 12.2 Congruency between the family’s desired and actual/perceived early identification services

of a child’s visual acuity is a good example of a developmental screening. In many communities throughout the United States and other parts of the world, optometrists volunteer to conduct these evaluations using tools that are quick and inexpensive to administer. The result of the screening is basically a yes/no – the child does or does not appear to require further evaluation.

There are at least four alternative ways to conduct developmental screening in order to actively locate children who may be eligible for special services when face-to-face assessment is unavailable (Bricker et al., 2013; Eapen et al., 2021). Some of these options are low-tech and require little if any digital resources, whereas some may require technology and access to resources that cost money. For example, digital resources may be needed for the children and families to participate (Bell et al., 2021; Morgan, 2020). The following four strategies will explore how to incorporate developmental screening assessments using: (1) mail, (2) phone, (3) Internet, and (4) virtual home visits for early identification of special needs in childhood.

Mail: Developmental screening through the postal system or mail delivery may be an option for families of young children. If someone close to the child (e.g., parent, family member, familiar caregiver) has a concern, they can contact their local provider(s), who could follow up on their concern by conducting a developmental screening assessment via mail.

Professionals conducting early identification efforts from a distance may find the postal service a useful tool as an alternative to face-to-face options. A procedure for early identification service by mail would be where professionals mail a developmental questionnaire to the child's address on record. Parent(s) and/or familiar caregiver(s) complete the developmental questionnaire and mail back to the staff or to a central location for scoring and feedback.

Special considerations should be made for children and families experiencing homelessness. For example, it is helpful to supply a self-addressed, stamped envelope for return of the screening results and to keep in mind that this method takes time and that there might be problems with sending and receiving the physical mail from the postal service. Return rates for questionnaires can be increased by making reminder phone calls to parents and sending a second questionnaire and reminder if the first one is not returned within a specified time frame (e.g., 2 weeks).

Telephone: Developmental screening assessment can also be completed over the telephone (Philpot et al., 2020; Pruski-Clark, 2020). The parent or service provider can initiate the phone call. A phone interview would consist of the professional using their developmental screening instrument to guide them during the phone call in asking questions. Many providers in the field of social work use this method for doing intakes because it is less intrusive (Macy, 2013).

Although answers to the questions are derived from the family member conducting the assessment at home, the instrument could be filled out by the professional. Considerations for using the telephone to conduct developmental screening include: (i) arrange a time for the phone interview that is optimal for parent(s), (ii) allow for the possibility for the child to participate in the phone interview because the parent may need time to interact with the child to determine if the child can perform a particular task, and (iii) conduct the interview in the family's preferred language.

After the screening is completed, the professional could score it while the parent is still on the line and share results if feasible. If not, scoring could be done later, and results shared with soon after the telephone call. Even in some countries that have very limited technological resources, adults without access to the Internet or a computer may have a cellphone, so screenings conducted in this way might be an alternative when a remote context is needed, such as during a quarantine.

Internet: Another way to actively locate children who may be eligible for early childhood services due to a delay or disability is through developmental screening with an online system. Online developmental screening may occur where a professional (e.g., healthcare, early childhood educator, social service provider) invites parent(s) of young children to complete developmental-behavioral

screening questionnaire(s) online. The downside of this approach is that access to high-speed Internet and technology hardware may not be available and, even if they are, some remote areas and parts of the world do not have reliable electrical service.

Parents can also independently complete questionnaires online. The online system scores and generates a report from the results of the screening assessment. A reply (e.g., letter/email/other/text) can be generated for parents whose children appear to be developing typically. Children who are identified as at-risk or whose parents indicate concerns may require a personalized response (e.g., telephone call, video conferencing). In order to access the Child Find system in the United States, for example, families need to have the technology needed for online developmental screening activities. The prerequisites typically include: access to the Internet or WiFi, electronic device (e.g., computer, iPad, smart phone), and resources (e.g., time, materials) to complete the screening with their child.

Virtual Home Visit: Conducting a developmental screening assessment during a virtual home visit is another alternative to in-person assessment(s) (Center for Health Care Strategies, 2020b; HARC, 2020; Healthy Families, n.d.; Johns Hopkins Bloomberg School of Public Health, 2020; NASHP, 2020). First, the professional provides a screening tool in advance for parent(s) to review. Some parents may wish to complete screening tool independently, or during the virtual home visit.

The virtual home visit could occur with video conferencing on the parent's smartphone or other electronic devices (e.g., home computer, laptop, iPad). For example, Skype or Zoom could be used to work with the family in their setting. Professionals score questionnaires and discuss results with parents during the virtual home visit. Be sure families have the technology needed to conduct a virtual home visit. Screening materials could be available in the home using things that are familiar to the child. Adequate time is necessary for parents to try and/or observe items with the child. Professionals may translate or adapt for cultural, language differences.

After the screening assessment has taken place by mail, phone, Internet, or a virtual home visit, the professional needs to communicate the results of the screening assessment to the parent/guardian/family member in a timely fashion. It is important that the outcome of the assessment has positive effects for the child and family, such as sharing helpful resources, making recommendations for next steps, and linking families with organizations and groups matched to the child's needs.

Providing Special Supports to Children During International Health Crisis

The early identification of risk, delay, and disability in childhood was one of many areas of service delivery that were halted or disrupted during the global pandemic. Specialized supports for many children were stopped, reduced, or completely

discontinued because of the health crisis (United Nations Children's Fund, 2020). Programs that addressed the most basic needs, such as providing nutritious food to children, were challenged to find ways of distributing these essential items. Supply chains to get the resources to children were often used. Access for families is necessary (Balenzano et al., 2020; Dondi et al., 2021; Spinelli et al., 2020; Stephen et al., 2020).

There were noticeable impacts on the childhood of children around the globe based on gender. Gender-based differences were found with services children received or did not receive during the pandemic. For example, in some countries, girls are impacted differently compared to boys (Akmal et al., 2020; Fund, 2020). Children worldwide were disadvantaged when COVID-19 changed their lives.

There are dire implications for children with special needs when supports are lacking. One consequence of removing supports is that children with delays or disabilities may have a negative trajectory, fall further behind their typically developing peers, and find it difficult to reach their individualized growth and development goals. Another consequence is that families may not have adequate resources for their children (Marshall et al., 2016a, b; Schonwald et al., 2009). For example, parents around the world had their employment significantly impacted by the health crisis. Many parents had to make alternative arrangements with their jobs, quit jobs, or significantly change how they did their jobs as a result of the pandemic (United Nations Children's Fund, 2020; U.S. Dept. of the Treasury, 2021). With children and their families impacted by the health crisis, the international community must focus on children now.

The early years are crucial for optimal developmental and educational outcomes. Working with international, national, and local partners can support young children (Grisham-Brown & McCormick, 2013; Huntington et al., 2016; UNICEF, 2020a, b, c). High-quality early education and care can have long-term benefits for children (Bakken et al., 2017; Ramey & Ramey, 1998). Family engagement is a critical element in helping a child access supports and service(s) (Bethell et al., 2011; Busillo-Aguayo et al., 2015; Jennings & Hanline, 2013; Gordon et al., 2020; Marshall & Raffaele Mendez, 2014; McWilliam et al., 2000; Pabian et al., 2000).

The pandemic presents challenges; however, there are also possible positive outcomes from the global pandemic, like families being able to spend more time together (Neece et al., 2020; Redquest et al., 2021; United Nations Children's Fund, 2020; U.S. Dept. of the Treasury, 2021; Yoshikawa et al., 2020). People can be resilient in the face of adversity (Dzigbede et al., 2020). For example, the reopening of schools shows the resiliency of children, families, and professionals (Dzigbede et al., 2020; UNESCO, 2020a, b; UNICEF, 2020a, b, c), and adjusting to new routines (Lagomarsino et al., 2020; Save the Children (2020a). Virtual strategies and alternatives to face-to-face assessment can support early detection of risk, delay, and/or disability. Yet more research is needed to understand the impact of using these four alternative strategies, for *Trovare* works best when we start with identifying the challenges that exist in seeing what children and their families need. We can help children and their families "be seen" when we *trova bambini*. The essence of collaboration is working together to optimize child and family outcomes (Bagnato & Neisworth, 1999; Ritz et al., 2020; Save the Children International, 2020b).

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Chapter 13

“It Just Does Not Work”: Parents’ Views About Distance Learning for Young Children with Special Needs



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Since the onset of COVID-19, children, parents, and educators across the world have been impacted by school closures (Song et al., 2020). Worldwide, “more than half a billion children have been forced to become virtual-school learners as they shelter in their homes while parents, siblings, and other family members have taken on the new role of learning facilitators, pseudo teachers, and coaches” (Cohen & Kupferschmidt, 2020, p. 45). In the United States, 93% of school-age children engaged in some form of distance learning during COVID-19 when in-school classes were suspended (US Census, 2020). However, that percentage was considerably lower for preschool children (Friedman-Krauss et al., 2021), with many of them disengaged from any means of formal schooling during that time.

While the difficulties brought on by COVID-19 have been challenging for all children and their families, these challenges may be exacerbated for children with disabilities who are particularly reliant upon the special education services they are supposed to receive (Hill, 2020; Masonbrink & Hurley, 2020). These children comprise about 14% of US public school students (Institute for Educational Sciences, 2020). However, few studies have investigated the effects of COVID-19 on students with disabilities and their families. Therefore, we know little about the educational impact of COVID-19 on them. The present study explored parents’ reports of how young children aged two through eight years receiving special education services and their families have been impacted by the delivery of services during COVID-19. As Aishworiya and Kang (2021) argue, because of their

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increased risk and fragility due to their special needs, these children “warrant special attention to minimize having disproportionate consequences” (p. 2155).

Theoretical Framework

The home activities that children engage in during the early years provide them with critical opportunities to acquire the early literacy and numeracy skills their teachers expect of them when they start school (Serpell et al., 2005; Sonnenschein et al., 2016). Thus, it is important to understand what home learning experiences young children from different backgrounds have and how these are related to what teachers expect. This research reflects academic socialization theory (e.g., Puccioni, 2015) and Bronfenbrenner’s (1979) ecological model. Parents’ academic socialization includes parents’ attitudes, values, goals, expectations, and beliefs about education as well as the opportunities and activities they make available to their children (Puccioni, 2015). According to parental involvement theory (Hoover-Dempsey et al., 2005), parents must believe that they have the relevant skills to successfully engage children in educational programs. Most research using Hoover-Dempsey et al.’s theory (2005) is based on typically developing children and their families. However, it is also applicable to children with special needs and their families (e.g., Schmidt, 2013), although there has not been much research on with such populations. Of particular importance to the research reported in this chapter, parents of children with special needs may be less likely to feel they have the relevant skills with which to assist their children at home, especially during times when there is less school support (Wendel et al., 2020).

Bronfenbrenner’s (1979) ecological model posits that children’s development occurs in several overlapping contexts (e.g., microsystems) that need to work well together (mesosystems) to optimize children’s development. For example, Epstein (2001) talked about overlapping spheres of influence in which parents and educators together exert an influence on children’s learning. Relatedly, Hoover-Dempsey et al. (2005) discussed the importance of home and school factors in predicting parents’ involvement in their children’s formal education. Parents not only need to know what teachers expect of them but also feel able and willing to support their child’s formal education.

As Benner and Mistry (2020) recently noted, macro-level (societal) crises, such as the COVID-19 pandemic, can and do have long-lasting effects on children’s development. They describe the relevance of life course theory (Elder Jr., 1998) for understanding children’s development during and following the COVID-19 pandemic: “Human development is viewed as a tapestry of intertwined developmental trajectories...with critical transition points...and linked lives...all of which are influenced by young people’s daily ecological contexts, larger social structures and the broader sociohistorical context” (p. 236). Thus, it is critical to document the home environments of young children, particularly those with special needs, during the COVID-19 pandemic, as their home learning experiences during COVID-19 may well predict their subsequent academic trajectories (Gennetian & Hirsh-Pasek, 2020; Hirsh-Pasek et al., 2020; Wendel et al., 2020).

As Benner and Mistry (2020) and others (Gennetian & Hirsh-Pasek, 2020; Lai & La Greca, 2020) have discussed, children’s educational development can be directly affected by the instruction they receive as well as indirectly affected by environmental stressors (e.g., familial unemployment and other such stressors). Unfortunately, the number of stressors that families are facing during COVID-19 has greatly increased since before the pandemic (e.g., Patrick et al., 2020; Prime et al., 2020; Russell et al., 2020). More children are growing up in poverty now than before COVID-19 (Chen & Thomson, 2021). Financial difficulties make resources less available to families, increase stressors experienced by family members, and result in more negative family interactions (Sonnenschein et al., 2018). For example, Prime et al. (2020) discuss the cascading manner that various forms of social disruption such as financial insecurity, caregiving responsibilities, and confinement-related stress can have on the short- and long-term development of children. Similarly, Sonnenschein and Grossman (2020) found that parents ($N = 381$, primarily mothers) who reported engaging in any form of distance learning with their children also reported being stressed and drinking more than other respondents (see also Sonnenschein et al. 2021b). The negative impact of COVID-19 is a particular issue for children whose special needs place them more at risk for negative consequences (Aishworiya & Kang, 2021; Asbury et al., 2021; Patel, 2020). These latter studies, however, focused primarily on mental health issues rather than educational ones these children and their families faced during COVID-19. Notwithstanding, these authors and others (e.g., Wendel et al., 2020) suggest that educational issues can and will arise as indirect outcomes of the stressors these families and their children experience.

Despite the important impact family stressors can have on various aspects of all children’s development, this chapter focuses primarily on how families with children who have special needs are handling their children’s schooling during COVID-19. What parents are doing to school their children at home (distance learning) when schools are not fully operational is a less-well-studied topic and most of the available research, albeit limited, has focused on typically developing children and their families. It is critical to consider children with special needs because in addition to the disruptions that other children are experiencing, these children are also losing access to the rehabilitative services they normally receive in school (Schariti & McWilliam, 2021; Wendel et al., 2020).

Review of the Literature

This section reviews literature on the educational home environment during COVID-19. The section begins with a brief review of the home learning environment for typically developing young children. It is followed by a brief review of such an environment for young children with special needs. Much of these two reviews of literature focus on distance learning or online formal education during the COVID-19 pandemic. We use the two terms interchangeably in what follows.

Online Formal Education for Typically Developing Young Children

There is a dearth of research on this topic, particularly with US samples. As will be shown in the brief literature review that follows, parents of young children in the United States (e.g., Stites et al., 2021) and abroad (e.g., China: Dong et al., 2020) express negative views of what is expected of them during distance learning and the impact of distance learning on their children. These parents, many of whom are highly educated, report not having the time to do all that teachers expect of them. They note that distance learning is not appropriate for young children who often may not have the attention span or self-regulation skills necessary to participate in formal remote learning activities. We discuss this further when we review relevant studies in more detail. In addition to concerns parents expressed about young children not having the self-regulation skills to engage in and benefit from distance learning, many parents throughout the world concluded that this form of learning, at least as it was enacted early during COVID-19, did not foster children's social skills (Hirsh-Pasek et al., 2020; Stites et al., in press).

From their study with a sample of 162 US parents of children between two and nine years of age, Sonnenschein et al. (2021a, b, c) found that parents viewed their children's home-based literacy and digital activities as having increased during COVID-19. However, they did not ask whether the activities stemmed from requests by teachers or were initiated by the children or families. The data for Sonnenschein et al.'s (2021a) study were collected in May 2020, several weeks after most US schools had ceased in-person instruction. On the other hand, Barnett and Jung (2021), using a national sample of about 992 US preschool children and parents, found that by December 2020 parental supports of children's learning at home had decreased from the prior spring at the outset of the pandemic. Potential difference(s) between the nature of the home learning environment early and later during the pandemic is an important variable we will revisit later in the chapter.

In one of the first studies on what parents are doing during COVID-19 with their young children, Dong et al. (2020) examined the perceptions of 3275 Chinese parents in Central Mainland China. These parents held a negative view of distance education for young children. They expressed concerns with their children's ability to self-regulate in order to participate in lessons, their own lack of time and knowledge to teach their children, and an increase in screen time.

Lau and Lee (2021) collected data from 6702 parents of kindergarten (comparable to US preschool and kindergarten) and primary school children in Hong Kong three weeks after in-school classes were suspended. Parents reported that their children had difficulty completing tasks without significant parental oversight. Parents also wanted more support from schools. Abuhammad (2020) looked at comments given on Facebook by 248 Jordanian parents of school-age children during April–May 2020. Most of their comments focused on barriers they were experiencing with distance learning.

Stites et al. (2021) collected data using an online survey completed by 166 US parents of preschoolers during spring 2020 when most schools in the United States had ceased in-person instruction. The children were engaged or supposed to be engaged in distance learning. Many reported needing more assistance with technology than teachers provided and not having sufficient time to devote to assisting their children with lessons given the demands of their own jobs. These parents reported that such forms of instruction were not developmentally appropriate for young children. And, most importantly, distance learning negatively impacted the development of children’s social skills.

The concerns expressed by preschool parents in Stites et al. (2021) also were echoed by US teachers of preschoolers in the study by Sonnenschein et al. (2021b). In addition to concerns with technology and time, teachers indicated that they were not well prepared for engaging in virtual forms of instruction. Teachers who taught in preschools populated by primarily low-income families also indicated that many of the families lacked the technology and Internet services needed for distance learning. A similar pattern was found with teachers of three- through six-year-olds in the United States and Latin America (Atiles et al., 2021; Dias et al., 2020) and teachers (preschool through secondary school), including some special education teachers, in Turkey (Aytac, 2021).

We turn next to families with children with special needs. Although there is likely overlap in issues faced by families with the two groups of children, there has not been much research on parent involvement with children with special needs during or prior to COVID-19 (Van Keer et al., 2020). However, families with children with special needs face additional issues to those of families with normally developing children. These include negative cultural beliefs about disabilities, stigma, and prejudice, and difficulties accessing and receiving services (Acar et al., 2020).

Online Education of Young Children with Special Needs

The very limited research on COVID-19 with children with special needs has focused primarily on what special education services they have or have not received during COVID-19. For example, using parents from the United Kingdom, Toseeb et al. (2020) conducted an online survey with 339 parents of children with disabilities, typically autism, between March 2020 and May 2020, the first two months of social distancing in the United Kingdom. Most of the difficulties these families reported experiencing (e.g., limited access to services) were unique to children with special needs.

Neece et al. (2020) asked 77 mainly Latinx, Spanish-speaking families with young children with intellectual and developmental disabilities in California and Oregon five questions about the impact of the pandemic, services for their children, their coping, and their long-term concerns about the impact of the pandemic. Most of the parents had received a limited education (42% less than high school degree). Consistent with what families of typically developing children reported, these families expressed concerns about caring for their children during this period.

However, they also expressed concerns about the long-term impact on their children given the loss of special education services.

Barnett and Jung (2021) using data from a large-scale national study in the United States ($N = 992$) found a similar pattern. Children with disabilities were less likely to be officially diagnosed during the pandemic (and hence become eligible for services). Even for children who were identified as needing special education services, they were less likely to receive them or even receive their service plan (Individualized Education Plan) than prior to COVID-19 (see also, Murphy et al., 2021). Similar results were found by Latzer et al. (2021) with Israeli families with children with autism during the pandemic.

Wendel et al. (2020) worked with a group of 113 Canadian preschool families whose children had been identified with ADHD. Families were assessed right before COVID-19 and several months after the onset. Children's symptoms of inattention and impulsivity reported by parents increased with the onset of COVID-19. Interestingly, few parents reported changes to their own actual involvement.

Study Purpose and Research Questions

Prior to COVID-19, parents with children with special needs have long indicated that they need to be more involved in their children's formal education than parents with more typically developing children (e.g., Gowen et al., 1993; Munn-Joseph & Gavin-Evans, 2008). The limited research on parents' involvement during COVID-19 suggests parents of children with special needs must have greater involvement than prior to the pandemic (Toseeb et al., 2020). This increase in needed parental support leads to increased stress levels and lower levels of familial well-being (Alhuzimi, 2020). While additional research is beginning to emerge, there is much we still need to learn about the difficulties these parents are facing in assisting their children and what services/information they want from their children's schools.

This study further examined parents' perceptions of distance learning during the COVID-19 pandemic with 47 US parents of young children (aged two to eight years) with special needs. Our primary questions in this mainly descriptive study were: (1) What obstacles do parents of young children with special needs face with distance learning? (2) How do these parents expect schools to support their children distance learning? Parents completed an online survey of semi-structured and open-ended questions during October through November 2020.

Method

The study used a mixed-methods cross-sectional design. Following an extensive review of research related to the educational system for both young children and children with special needs during COVID-19, an online survey was developed. The

survey included both multiple-choice and open-ended questions resulting in qualitative and quantitative data.

Participants

Participants in the study were anonymous and responded to the Institutional Review Board (IRB)-approved research protocol; the study was categorized as exempt because no direct interaction with participants was involved. Parents were recruited via social media sites targeting parents of children receiving special education services. Two hundred and fourteen parents responded to our survey. However, only parents with a child between two and eight years old were included in analyses for the present study ($N = 47$). Participants included 44 mothers and 3 fathers between the ages of 30 and 48 years (mean [M] = 39.84, standard deviation [SD] = 4.33; see Table 13.1). Parents reported having one to six children ($M = 2.00$, $SD = 1.03$). Eighty-five percent of parents were married. Most of the participants identified as White (88%), had at least a bachelor's degree (85%), and an annual household income for 2019 of \$100,000 or more (65%). These findings are consistent with demographics of other online surveys (e.g., Dworkin et al., 2016; Whitaker et al., 2017). Parents lived in 12 states across the United States, with 80% of parents residing in the Middle Atlantic States. Not all parents responded to every survey item, so the number of participants across questions varied.

The mean age of children receiving special education services was 6.15 years ($SD = 1.38$), and the majority (78%) of those children were male. Most children (94%) attended public school (e.g., Head Start, Developmental Center, kindergarten, and elementary school), and 72% of parents reported that their child's school had not reopened at the time of the survey. According to their Individualized Education Program/Individualized Family Service Plan (IEP/IFSP)/504 plan, children's primary educational disabilities were Autism Spectrum Disorder (28%), Developmental Delay (21%), Other Health Impairment (17%), Multiple Disabilities (17%), Speech or Language Impairment (6%), Intellectual Disability (4%), Specific Learning Disability (2%), and Hearing (2%) or Orthopedic Impairment (2%). General information about these different educational disabilities can be found in the Individuals with Disabilities Education Act (2004).

Procedure

Parents were invited to complete an anonymous online Qualtrics survey posted on social media sites from October through November 2020. Parents interested in participating were asked to click on the link provided by researchers. After opening the survey, parents were shown information about the study and what they would be asked to do, which included IRB-approved information about parents' voluntary

Table 13.1 Caregiver demographics ($N = 47$)

Variable	<i>M (SD)</i> or %
Age of parent (years)	39.84 (4.33)
Relation to child (%)	
Mother	94
Father	6
Race/ethnicity (%)	
Asian	4
African American/Black	4
Latino/a/x	4
White	88
Highest educational degree (%)	
HS/GED	6
Some college	9
Bachelor's	43
Master's	36
Doctoral	6
Marital status (%)	
Married/partnered	85
Divorced	6
Single	9
Household income (%)	
Under \$25,000	2
\$25,000–49,999	4
\$50,000–74,999	15
\$75,000–99,999	13
\$100,000–124,999	26
\$125,000 or more	39
Child gender (% male)	78
Child age (years)	6.15 (1.38)
Child grade (%)	
Preschool	13
Pre-kindergarten	20
Kindergarten	28
First grade	20
Second grade	15
Third grade	4

Note: Percentage totals may not equal 100% due to rounding
GED general equivalency diploma, *HS* high school, *M* mean, *SD* standard deviation

participation in the survey. Parents then were informed that opening the survey implied they consented to participate. Upon completion of the survey, participants were redirected out of the survey and their responses were saved in Qualtrics.

Measure

The Qualtrics survey consisted of 41 items, which were adapted from a survey used with parents of typically developing preschool children (Stites et al., 2021). That measure had been piloted and revised based on feedback and then administered to 166 parents of typically developing children. We modified this questionnaire for use with the current population of parents and piloted it with parents of children with special needs prior to wider distribution. The authors all have experience working with special populations of children and are familiar with their strengths and needs. Two of the authors are school psychologists with extensive experience working with families whose children have disabilities. The third author has over 10 years of classroom teaching experience as a dual certified early childhood special and general educator, including several years as a preschool special educator. The fourth author was an assistant teacher in a special education classroom for several years.

Survey items inquired about the impact of COVID-19 on the lives of parents and their children receiving special education services, the services they receive, and how those services were facilitated during the pandemic. Sample items are included in Table 13.2. Survey items were mostly closed-ended type questions with some open-ended ones. The multiple-choice question “What are your biggest concerns if distance learning continues?” is an example of a closed-ended question where participants were instructed to select all response options that apply. Responses participants could select included: Loss of academic skills, Loss of daily living skills, Loss of social interaction, Loss of related services, and Other. The survey utilized skip logic so that participants were only shown questions that directly applied to them and their prior responses.

Additional survey questions inquired about the parents’ demographic backgrounds, such as their age, race/ethnicity, household income, and highest level of education. Examples of demographic questions from the survey include: “What is your relationship to the child?” and “What is your marital status?”

Coding and Scoring of Data

Both quantitative and qualitative data were analyzed. Responses to the quantitative questions, typically multiple-choice, were downloaded directly from Qualtrics into SPSS (Version 27). The quantitative data are presented descriptively as percentages or means when appropriate. In a few cases, inferential statistics were used. In the case of the qualitative data, typically responses to open-ended questions, codes were developed, quantified, and compared. We used Cohen’s *d* to assess effect sizes, the strength of a finding (Cohen, 1988). An effect size of 0.20 or lower is generally considered small, 0.50 moderate, and 0.80 and above large. According to Slavin (1990), effect sizes of 0.25 and higher are considered educationally significant.

Table 13.2 Sample survey items

Items	Response type
Which of the following worked well for your child during distance learning? Please answer based on your experience with general and/or special education. Check all that apply.	Multiple choice
<ul style="list-style-type: none"> • Live video/synchronous instruction (e.g., Zoom lessons with the class) 	
<ul style="list-style-type: none"> • Live, small-group video instruction 	
<ul style="list-style-type: none"> • Asynchronous instruction (e.g., teacher sends lessons and activities for children to complete at their own pace) 	
<ul style="list-style-type: none"> • Clear lessons provided by the school 	
<ul style="list-style-type: none"> • Opportunities for social engagement with peers 	
<ul style="list-style-type: none"> • Flexible schedules for completing assignments • Other (please specify) 	
Prior to the onset of COVID-19 in Spring 2020, how did your child receive his/her/their special education services?	Multiple choice
<ul style="list-style-type: none"> • In general education with general education teacher support (special education consult) 	
<ul style="list-style-type: none"> • In general education with special education teacher support (e.g., special education comes into classroom to assist) 	
<ul style="list-style-type: none"> • In a separate special education classroom (e.g., not in a general education classroom) 	
<ul style="list-style-type: none"> • In both general and special education classrooms 	
How much does COVID-19 impact your day-to-day life?	Multiple choice
<ul style="list-style-type: none"> • Not at all 	
<ul style="list-style-type: none"> • A little 	
<ul style="list-style-type: none"> • Much 	
<ul style="list-style-type: none"> • Very much 	
<ul style="list-style-type: none"> • Extremely 	
How frequently does your child’s case manager/service provider typically communicate with you during this school year?	Multiple choice
<ul style="list-style-type: none"> • Daily 	
<ul style="list-style-type: none"> • Weekly 	
<ul style="list-style-type: none"> • Monthly 	
<ul style="list-style-type: none"> • My child’s case manager does not communicate with me 	
<ul style="list-style-type: none"> • Other 	
What concerns do you have about your child returning to school while COVID-19 is a concern?	Check all that apply
<ul style="list-style-type: none"> • Other families not following safety protocols 	
<ul style="list-style-type: none"> • My child has sensory issues, which prohibits mask-wearing 	
<ul style="list-style-type: none"> • Transitioning back to school routines 	
<ul style="list-style-type: none"> • Demand on teachers trying to teach in-person and virtually 	
<ul style="list-style-type: none"> • Risk of further school closures 	
<ul style="list-style-type: none"> • Virtual teacher with in-person class 	
<ul style="list-style-type: none"> • Reduction in special education services • Other 	

(continued)

Table 13.2 (continued)

Items	Response type
What are your biggest concerns if distance learning continues?	Check all that apply
• Loss of academic skills	
• Loss of daily living skills	
• Loss of social interaction	
• Loss of related services	
• Other	
What are the biggest challenges your child faces with distance learning as it relates to special education services?	Check all that apply
• My child needed constant adult support	
• Lessons/activities took too much time	
• We didn’t have the necessary materials at home	
• Little direction from the school	
• The academic requirements were too difficult	
• I did not have access to the necessary technology	
• Other	
Is there anything else you'd like to share about distance learning for children receiving special education services?	Open-ended
Is there anything else about the effects of COVID-19 on your child’s education that you would like to share with us?	Open-ended
What do you expect teachers/schools to do in order for distance learning to be successful for children receiving special education services?	Open-ended
What resources do you feel you need to receive from your child’s service providers or school to assist your child in distance learning?	Open-ended

Note: Demographic questions are not included in the table. For a multiple-choice response type parents were only able to select one response. The complete survey is available upon request from the authors

All qualitative responses were tabulated and analyzed by the researchers using a consensual coding process (Hill et al., 2005). First, responses were grouped into domains created by the researchers based on the participants’ responses. Then, core ideas (Hill et al., 2005, p. 200), or summaries of their responses, were established to enhance clarity within each domain. Lastly, a cross-analysis (Hill et al., 2005, p. 200) was used to develop final themes across participants. After the authors identified themes in the data, they engaged in investigator triangulation to compare themes and reconcile any questions. Additional information regarding the authors’ coding process is provided, as appropriate, in the Results section. Overall, coders demonstrated 98% interrater reliability. The few discrepancies in coding were resolved by discussion.

Results

Descriptive statistics were completed for responses to quantitative, multiple-choice questions prior to engaging in more formal analyses. The results indicated that the participating families were assisting their children with distance learning at a time when they already were suffering significant impacts of COVID-19. For example, responses to multiple-choice questions indicated that about 74% of the respondents reported that COVID-19 impacted them very much to extremely. Only about 10% said it had little impact on their lives. Most of this affluent sample said the largest impacts they experienced with COVID-19 was more limited available childcare (19%), less time for themselves (22%), and having to homeschool their children (25%).

It is important to remind readers that the participating families generally had more than one child (although not necessarily another one with special educational needs) who may have been receiving distance learning. We turn next to the two central questions addressed in this paper: the obstacles parents of young children with special needs face with distance learning, and what supports these parents want from schools for distance learning.

What Obstacles Do Parents of Young Children with Special Needs Face with Distance Learning?

Following an examination of the responses and analysis of the data from the survey, three main themes emerged. Theme one was the amount and type of special education services children were receiving. Theme two was a general dissatisfaction with distance learning. Theme three focused on the developmental level of the child.

Amount and Types of Special Education Services

Prior to the spring of 2020 when COVID-19 started, 87% of parents reported their children received their special education services in the general education classroom or in self-contained special education classes. The remainder received indirect special education services via consultation rather than direct instructional support. Ninety-eight percent received related services (e.g., Physical Therapy, Occupational Therapy, Speech/Language Therapy). Since COVID-19 began, 51% of parents reported their children received fewer special education hours than in the past. And, again in contrast to in the past, fewer parents (79%) reported their children received related services this past year: $t(38) = 3.70$, $p = 0.001$, Cohen's $d = 0.82$. Children receiving special education services and related services during COVID-19 typically received them through synchronous or asynchronous instruction over video (e.g., Zoom and Google Classroom).

The survey began with a multiple-choice question about what was working well with distance learning; however, responses to this question were limited. The largest response to what was working well was small-group video instruction, which was viewed favorably by 12% of parents.

As noted in Table 13.2, parents were asked the multiple-choice question: “What are the biggest challenges your child faces with distance learning as it relates to special education services?” Responses were consistent with what has been reported by families whose children are typically developing (Stites et al., 2021). That is, the parents in this study stated that their child needed constant adult support (88%) and the lessons and activities took too much time (36%) and were too difficult (29%).

However, based on responses to another multiple-choice question and unique to this population of young children with special needs, these parents also reported that they were concerned that if distance learning continued, their children would lose their academic skills (73%), their social skills (82%), their daily living skills (33%), and the skills fostered by related services (42%). Although most of these parents wanted their children to return to school as soon as possible, they also expressed concerns with their children’s safety considering ongoing COVID-19 concerns. That is, 60% were concerned that their children would be unable to follow safety protocols (social distancing, wearing masks), 38% said their children had sensory issues that would preclude wearing masks, and 32% thought their children would have difficulty transitioning back to the school routines. Forty-four percent were concerned that there might be a reduction in special education services once children returned to school. Given the difficulty that many children were thought to have with adjusting to changes in routines, 56% of the parents were concerned about possible further school closures. Approximately 35% of the parents thought their children’s teachers would have difficulty handling the combination of in-person and virtual instruction if children returned to school on a hybrid basis.

Parents also were asked two open-ended questions about the effects of COVID-19 on their children’s education. The first question was: “Is there anything else you’d like to share about distance learning for children receiving special education services?” (see Table 13.2). The second question was: “Is there anything else about the effects of COVID-19 on your child’s education that you would like to share with us?” Responses to both questions were similar. Therefore, we focus on responses to the second question. We coded any evaluative responses as either positive or negative in nature. For example, “This has been a horrible experience for my child” was considered a negative response, while “My child’s ability to stay seated has not increased, but his ability to complete his work with parental and special ed support has helped up complete 100% of our class work” was considered positive.

We then counted and statistically compared the number of positive and negative responses. There were significantly more negatively coded responses (95%) than positively coded ones: $t(19) = 39.00, p < 0.001$, Cohen’s $d = 0.22$. In addition to the evaluative nature of the response, thematically, responses to this question fell into one of two categories: general dissatisfaction with distance learning, and concerns about children’s development and how it should be addressed.

General Dissatisfaction with Distance Learning

The most common theme across responses was that “It’s not working. Schools need to open.” Another parent noted, “It is detrimental, and no accommodation being made” while another noted, “Our entire family (3 other kids) is truly suffering with little support.” One parent stated, “This is a NIGHTMARE” while another indicated, “Distance learning does not work for special education” and “It’s a living nightmare for parents.” Consistent with responses to the prior open-ended questions, parents discussed specific areas of need that made distance learning difficult. These included lack of consistent scheduling so that children could receive both general and special education services (18%). Instead, the amount of services children received was lowered due to scheduling conflicts and children did not make progress (12%).

Concerns About Ways to Support Children’s Development

Parents expressed concerns about their children’s academic and social progress in their responses to qualitative, open-ended questions. Response like “My child is regressing across all academic and social metrics” was typical of such responses. As a result of the parent-perceived academic and social losses, some parents were willing to take the risk of their child returning to school even before it was deemed safe to do so. One parent noted, “Even if it is not safe for everyone to go back, I would like to see sped (sic) students prioritized for in-person learning.”

Parents also discussed needs their children had that made distance learning difficult for the child and (consequently) the parent. “We’ve had to drop out of most of my son’s general education class time due to his inability to focus for both special ed and gen ed. He is losing out on the inclusive education he deserves.” This parent further noted that “I’m a single parent who works full time. Since my son requires my full attention to do school, I cannot work during school time. I had to cut his day short so I could work.”

Another parent noted, “Virtual learning has been a struggle often as our child requires prompts to stay on task and engaged.” Still another parent stated, “Distance learning does not work well for my son due to his intellectual disability. We did the very best we could last spring following the instructions from his teacher and related service providers, but I do not have training as a special ed. teacher, PT, OT, or SLP (sic). And I had to divide my time between helping him and his typically developing sisters. I may have stopped him from losing some skills, but I do not feel like he made any progress.”

The second open-ended question was: “Is there anything else you’d like to share about distance learning for children receiving special education services?” As with responses to the prior open-ended question described in a prior section, we counted and then statistically compared the number of positive and negative responses. Ninety-four percent of parents gave primarily negative responses: $t(16) = 33.00$ $p < 0.001$, Cohens’ $d = 0.24$. Again, the responses fell into the same two coded

categories as described above. Consistent with responses to other questions, 30% of parents expressed concerns about the lack of progress demonstrated by their children. “All progress made is lost,” and “This has been a horrible experience for my child. He is basically going to have to repeat this grade. He needs in person learning.”

How Do Parents Expect Schools to Support Their Children’s Distance Learning?

We first asked parents, “What do you expect teachers/school to do in order for distance learning to be successful for children receiving special education services?” As with the prior two open-ended questions, parents responded to this question with many negative comments (94%): $t(16) = 33.00, p < 0.001$, Cohen’s $d = 0.24$. The responses parents gave were highly variable, touching on all possible aspects of these children’s needs and development. As with prior responses, one parent noted that “Not sure distance learning can be successful for special ex (sic) kids. They need one-on-one, hands on attention that only comes with in-person learning.” Another said, “There is nothing they can do for those with serious disabilities to get benefit from virtual learning.” The remainder of the responses focused on (1) ways to modify virtual learning by changing the nature and timing of assignments, and (2) modifying the structure and timing of the classes and the expectations for completing assignments. For example, one parent indicated a need for both changing the nature of the assignments and the timeline when she stated her child need, “More time to turn assignments in and more written assignments not requiring a computer.”

The second question was “What resources do you feel you need to receive from your child’s service providers or school to assist your child in distance learning?” Eighty-nine percent of the parents’ responses focused on negative issues: $t(24) = 29.50, p < 0.001$, Cohen’s $d = 0.33$. Although 8% of the parents mentioned that they were satisfied with what they were receiving, the remainder of what were negative responses fell into three categories, mentioned below with sample quotes. Three themes emerged from parents’ responses to the open-ended question about resources: Child needs in-person schooling, child needs in-home instruction, and parents need more assistance with instruction.

Child Needs In-Person Schooling: “My child needs to be in a school environment and/or have one on one support,” and “It’s impossible-kids need hands on services. PT, OT for example can’t be done over zoom. Kids are falling behind.”

Child Needs In-Home Instruction: “Provide in-home assistance,” and “One on one instruction targeting goals and objectives.”

Parents Needed More Assistance with Instruction: “A learning plan so I can aid in the teaching process,” was a common response. This category was consistent with what parents of typically developing children requested (Stites et al., 2021). A

few parents requested that schools provide them with assistance with technology, “faster internet access, laptop,” and “access to printers.”

Discussion

As discussed by Warner-Richter and Lloyd (2020), young children with special needs have been significantly negatively impacted by COVID-19. They have lost or had a decreased amount of in-person therapy services and limited access to special education accommodations and adapted materials. Their families have had difficulty taking on the roles previously assumed by special educators and therapists. And there has been increased social isolation for families of children with special needs or disabilities. There is also the added concern that for parents who have lost jobs, they also may have lost their medical insurance.

Similar to the findings by Warner-Richter and Lloyd (2020), parents in this study reported three issues relevant for their children’s education. First, their children’s special education and related service hours were decreased during virtual learning. The reduction in these services, according to the parents, unfortunately led to a decrease in their children’s critical daily living, academic, and social skills. Despite their frustration with the reduction in services, many parents acknowledged that it was impossible to deliver virtually special education services. Second, parents reported that their children were unable to attend to instruction without significant adult support. Third, parents were unable to provide their children with assistance due to their own occupational requirements, caring for other children in the family, and stress caused by COVID-19. The parents in this study were frustrated with the situation and frequently reported that distance learning for children with special needs “just doesn’t work.” Some parents requested more modifications to assignments, flexible due dates, and better instructions for completing work. More parents, however, felt the only option was a return to school or an in-home tutor.

Limitations and Future Research

Although we believe that the findings of the study will make important contributions to the field, as with any study, there are some limitations. One, the size of the sample ($N = 47$) was small. Second, our sample was a convenience sample, hence, not representative of the US population. However, it has been found that convenience samples are among the most commonly used sampling technique in developmental science (Jager et al., 2017). Two, the nature of the sample (primarily highly educated White families) also limits generalizability of the findings and causal explanations (Dearing & Zachrisson, 2019; Etikan et al., 2016; Sedgwick, 2013). The findings may not necessarily apply to less educated parents or low-income families. It is important to mention here that Neece et al.’s (2020) study with a sample of Latinx,

Spanish-speaking parents with lower education background reported findings similar to the present study. Three, given the small sample size, we were not able to explore whether there were differences in patterns among children with different types of disabilities or special needs. Four, these data were collected in the fall of 2020, about six months into the pandemic. As Barnett and Jung (2021) found, parents’ behaviors and related consequences to children’s outcomes changed over time. Thus, it is important to conduct longitudinal studies or sample behaviors at different points in time to document whether there are continued changes, and, if so, in what specific ways? Five, we did not collect actual outcome data from children or reports from teachers. Our results are parents’ reports and observations. It would be interesting to view this from the child’s and/or teachers’ viewpoints.

Future research should expand the sample size, recruit a more economically and racially diverse group of families, as well as explore potential differences among children with different types of special needs. More research also is needed on how to provide virtual learning to young children with special needs. We know that many parents felt it was unsuccessful during the COVID-19 crisis. However, it is likely that distance learning in some form is here to stay (e.g., snow days) and therefore research needs to consider how best to support this population of young learners. Schools need research-based recommendations to avoid a loss of daily living, academic, and social skills in the future.

Strengths and Implications

Despite limitations noted above, this study provides important information about distance learning for young US children with special needs during COVID-19. Many parents in our sample expressed significant concerns about the lack of learning their children demonstrated or, even more seriously, potential setbacks their children suffered because they were not receiving their mandated services. The views of these parents remain critical in the likely event distance learning is implemented in some format in the future. For example, educators and administrators need to be aware of the need for flexibility in both assignments and timelines and consider this when setting requirements. Perhaps more importantly, the need for constant adult support should be taken into careful consideration when planning for distance learning. As we learn more about what worked during distance learning – and what did not – we need to make sure we implement those lessons learned.

In addition to concerns expressed about limited services or disruptions in services and children’s lack of learning, many parents believed that their children would have significant difficulty transitioning back to in-school classes. These concerns related to changes in school policies including the ongoing risk of COVID-19 and their child’s ability to wear a mask. As we mentioned in a prior section, 60% of the families mentioned their children would be unable to follow safety protocols (social distancing, wearing masks) and 38% said their children had sensory issues that would preclude wearing masks. About a third of the parents said their children would

have difficulty transitioning back to the school routines. In other words, beyond any difficulties these children may have had with their academic progress, the need to adhere to safety precautions and more general school routines would be a significant impediment for these children when they returned to school.

Conclusion

Educators and researchers have expressed concerns about the educational trajectories of typically developing children and, especially, of those who have special needs (Barnett & Jung, 2021) because of consequences arising from COVID-19. Of additional concern is the need to provide teachers with sufficient training to develop the appropriate skills to engage in virtual learning (Dias et al., 2020). That is, if children have fallen behind, and the limited evidence suggests they have, how much effort will be needed to improve children's skills and bring those levels back to what they would have been without the COVID-19 pandemic? As Morrison et al. (2019) and others (e.g., Barnett & Jung, 2021; Hirsh-Pasek et al., 2020) have noted, early schooling plays a critical role in children's academic and non-academic development. If the quality of schooling during the early childhood years is sub-par, as seems to be the case for these children with special needs during the COVID-19 crisis, it may not be possible to fully address the loss of learning caused by the disruptions associated with the pandemic.

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Chapter 14

Lessons Learned Supporting Families of Young Children with Disabilities via Telehealth During the COVID-19 Pandemic



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Behavior problems are a common and concerning challenge among children with developmental delays. Approximately 50% of children with developmental delay or disabilities have a comorbid mental health or serious behavior problem—a prevalence three times as high as that found in children without disabilities (Baker et al., 2010). Behavioral parent training is the gold-standard intervention for treating child behavior problems in typically developing children (Eyberg et al., 2008) and in children with developmental disabilities, including preschool-aged children (Bears et al., 2015; McIntyre, 2013). Behavior problems are associated with heightened parenting stress and caregiver burden (Baker et al., 2003). There is some research to suggest that there is an interactive dynamic, with children’s behavior problems a predictor of parents’ stress and stress experienced by parents associated with increases in children’s behavior problems over time (Neece et al., 2012). These transactional relationships over time present important intervention needs (Crnic et al., 2017). That is, both parenting stress and child behavior problems are important targets for early intervention.

Unfortunately, high levels of parental stress are associated with reduced or no response to behavioral parent training for children with developmental disabilities (Osborne et al., 2008; Robbins et al., 1991; Strauss et al., 2012). Consequently, parental stress may attenuate the efficacy of the gold-standard, empirically supported

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treatment for behavior problems among children with developmental disabilities (Eldevik et al., 2009). As such, parental stress is a critical point of intervention for improving both parent *and* child outcomes in families of children with developmental disabilities. Despite evidence that parenting stress attenuates the efficacy of behavioral parent training, parenting stress is rarely addressed directly in interventions targeting child behavior problems (McIntyre, 2013; McIntyre & Neece, 2016).

Our work currently evaluates the additive benefits of combining Mindfulness-Based Stress Reduction (Kabat-Zinn, 1990) or a social support/education group with ten weeks of behavioral parent training (McIntyre & Neece, 2018) to understand the impacts on child behavior problems, parenting, and parenting stress. In our study we chose to first intervene on parenting stress given that increased stress may interfere with the uptake of behavioral strategies and parenting skills that are the focus of behavioral parent training. Our study, funded by the National Institutes of Health (McIntyre & Neece, 2018), uses a randomized controlled trial design to evaluate two intervention conditions: Behavioral Parent Training-Mindfulness (BPT-M) and Behavioral Parent Training-Education (BPT-E). Families with preschool-aged children with developmental delay were screened for study inclusionary criteria, enrolled, and randomized to one of the two intervention conditions (see McIntyre et al., 2021). The plan was for both intervention conditions to involve 16 weeks of group-based intervention, facilitated by two master's level mental health professionals (e.g., social workers). The BPT-M condition was allocated six weeks of Mindfulness-Based Stress Reduction delivered first, followed by ten weeks of behavioral parent training. The BPT-E condition involved six weeks of social support and education delivered first, to be followed by the same ten weeks of behavioral parent training. Families were randomized to one condition and received intervention in a community setting (e.g., early childhood center) within a group of 10–20 participants throughout the 16-week period. The two conditions were identical except for the first six weeks of intervention. The latter portion of these plans was disrupted by COVID-19.

When the school closures associated with the pandemic occurred in March of 2020, our team was in the middle of delivering our intervention to 73 families enrolled across two states. We had just completed the first six weeks of intervention (Mindfulness-Based Stress Reduction or social support with education) and were transitioning to the final ten weeks of intervention (behavioral parent training). Because of the shelter-in-place orders and associated school closures, our team scrambled to prepare the ten-week behavioral parent training intervention for online delivery.

This chapter tells the story of our shift from in-person group-based parenting classes to the delivery of virtual parenting classes for families with young children with developmental delay. In so doing, we outline the lessons learned by our team. In the sections below, we describe practical tips and concrete examples for mental health providers to follow in their implementation of telehealth services both during the pandemic and beyond.

Delivery of the Virtual Intervention Group

When transitioning from an in-person group setting to a synchronous telehealth model, it is important to consider the differences that exist in the delivery of the group. There may be problems that arise that are unique to virtual groups, such as technological challenges, that pose unanticipated challenges to providers. It can also be more difficult to build connections among participants and group facilitators due to the lack of warmth that comes with physical presence. For this parenting group, our team decided that it was best to foster an environment for these parents that resembled the in-person setting, both due to the requirements of the curriculum and our research protocol, as well as the success of the interactive, personable nature of the groups. To create a virtual space that was similar to that of an in-person experience, our team engaged in thoughtful consideration of elements that needed to be retained or added to the virtual space for the intervention to be engaging and effective.

Lessons Learned

Below we describe our 20 lessons learned in transitioning the behavioral parent training sessions from in-person parenting groups to remote, synchronous delivery. The 20 lessons learned (or helpful tips) are presented in Table 14.1 and described in more detail below.

Lesson 1: Implement Co-facilitation Strategies

In a virtual setting, we recommend implementing co-facilitation strategies. Co-facilitation, or having two people lead a parenting group, allows the facilitators to switch back and forth between one another when delivering content, maintaining attention of the group participants while keeping the experience interesting. Additionally, the presence of two facilitators allows group leaders to gauge how the participants are feeling about the material. When there is only one facilitator, there is a risk that some visual cues may go unnoticed because the facilitators can only attend to so much at once. With two facilitators, tasks can be divided up and there can be better monitoring of the group's responses during content delivery. Building from that point, co-facilitation offers the ability to better cater to participants' needs since there are two facilitators who can address potential concerns, questions, or conversations. Co-facilitation can also help alleviate the responsibility of either facilitator, knowing that they will have a partner in the delivery of content and support. This partner delivery permits either facilitator to answer questions, bring in different perspectives, and potentially continue leading the group if the other facilitator

Table 14.1 Lessons learned supporting families of young children with disabilities via telehealth

Lesson learned	Description
1. Implement co-facilitation strategies	Having a co-facilitator allows for switching back and forth between leaders and helps the group maintain their attention.
2. Provide technology support	Having a tech support person present during intervention allows for group facilitators to focus on leading the group.
3. Use nonverbal communication	Because intervention is not in-person, group facilitators need to work hard to display warmth and other nonverbal cues of support on a screen. It is more effortful to show more overt signs of support and enthusiasm in a virtual space.
4. Establish ground rules for interaction online	It is helpful to demonstrate how to mute/unmute, turn off screens, and show different types of display options on Zoom. Many participants will not feel initially comfortable using a virtual platform.
5. Consider participant faces and nonverbal cues	Look at participants to determine how they are responding to the material and the discussion. Comment on their nonverbal cues (e.g., “I see a lot of nods there”).
6. Adapt PowerPoint presentations	A PowerPoint presentation works well in a virtual setting and can serve as a centerpiece. Although we do not recommend a PowerPoint presentation during an in-person setting, this visual display is helpful during a virtual intervention group.
7. Prepare thoroughly prior to online sessions	We recommend a weekly dress rehearsal to work on timing and technical transitions. We recommend getting a feel of how the session will look to participants using different platforms (e.g., phone, tablet, laptop).
8. Take advantage of technology tools	We used as many Zoom features as possible, such as the whiteboard, polling feature, video sharing, and breakout groups. The mix of features improved participants’ attention and made each session more dynamic and stimulating.
9. Expand accessibility and promote inclusion	We provided resource lists for free Wi-Fi or hotspot access to families. In some cases, our team provided loaner tablets and hotspots.
10. Create a website for easy access	Although not required, our team created a group website that was password protected. The site was simple and contained links to the weekly Zoom sessions, links to the PowerPoint slides, and links to a weekly survey of consumer satisfaction.
11. Use powerful visual images	We recommend pictures, graphs, and/or cartoon images on nearly every slide of the presentation to keep things interesting and dynamic. Thoughtfully include photos that are diverse and inclusive.
12. Establish additional contact/outreach	The pandemic introduced additional stress and caregiving burden to many families. Our team provided additional check-ins via phone, text, and email. We also send holiday cards, birthday cards, and notes of appreciation via US mail.
13. Welcome participation	Aim for a culture where parents know they are appreciated in whatever way they can participate. For example, honor families that don’t turn on their screens or multi-task (e.g., prepare dinner for their kids). Challenge yourself to think critically about preconceived notions of “the right way” to engage with a group. This mentality led to more engagement, not less.

(continued)

Table 14.1 (continued)

Lesson learned	Description
14. Refer to parent principles	It is helpful to immediately debrief after each session and identify important contributions that participants made. We jotted these down and incorporated some of parents' "words of wisdom" as parent principles in the next week's session.
15. Reinforce participation	It is helpful to find creative ways to praise and encourage participation during Zoom sessions. We would provide specific praise during sessions and sometimes change their Zoom name to things like "Superstar Sarah" or "Gold Star Pete."
16. Acknowledge birthdays	With permission from participants, we acknowledged birthdays. We sang or put up a Zoom birthday background to help acknowledge the birthday. It helps build group cohesion and keep the atmosphere positive and fun.
17. Incorporate music	If staffing allows (maybe use the tech support person), we recommend having a fun outro song at the end of each session. We danced and sang as we said our goodbyes at the end of each group. Parents loved this and would gather their children for the dance party at the end.
18. Use the "parking lot" metaphor	To simulate a natural, in-person environment where people can informally chat at the end of each session as they "walk to their cars in the parking lot," we created a breakout room where parents had the option to spend five extra minutes chatting at the end of the session. We called it "the parking lot."
19. Show appreciation to the co-facilitator	Appreciate the co-facilitator's strengths and convey appreciation to them. This models a functional relationship for group members, which is especially important when working with families.
20. Bring skills and talents to each session	Showcase your talents during sessions, be it artwork, comedy, singing, language abilities, cartooning, etc. We found this strategy brought our Zoom sessions to life!

encounters technical difficulties or is unable to attend, thus preventing cancellation of the group session. Overall, a second facilitator ensures the group is not abandoned in a virtual setting. Our team found this to be a vital component of our telehealth group.

Lesson 2: Provide Technology Support

Another important component to the delivery of a virtual group is technology support. We used our research assistants who would have functioned as child care providers in an in-person group setting to serve as technology support. Because technological issues inevitably arise, technology support staff allow the facilitators to focus on leading the group while technological challenges are resolved behind the scenes. This leads to minimal disruption since one of the group facilitators does not have to pause content delivery to offer solutions to the given issue. A technology

support position is necessary in a virtual group setting to ensure the smooth delivery of material, as well as participants' access to the material. Each session we announced the name and contact information (for easy offline texting) for our tech support specialist.

Lesson 3: Use Nonverbal Communication

Our team also found it necessary to keep in mind that virtual delivery of intervention groups involves performing for the audience. Thus, we learned that nonverbal communications, including gestures and facial expression, are important for leading a virtual group. Because the group is not gathered together in-person, there is a lack of warmth and connection felt among members of the group and the facilitators. Therefore, additional effort must be put in to display this connection from one screen to another. It can be theatrical at times, but it can make all the difference. These enhanced performative measures can take on many forms. First, it is important to greet people as they enter the virtual space. This recognition assigns importance to each group member's attendance, creates a sense of belonging, and generates a welcoming environment. It is also useful to be aware of the facial expressions that are displayed. Just as one should monitor their body language and facial expressions in-person, it should carry over to this setting as well. Be mindful of one's resting face and the facial reactions to questions, answers, or other statements made by group members. It is also important to be more expressive than usual in a telehealth setting since the camera and microphone cannot always capture the magnitude of various emotions. This includes exaggerated hand gestures, vigorous head nods, and big smiles. When conducting groups over a screen, it can be tempting to slip into a "talking head" webinar style of delivery, which can be effective in some settings. However, in our experience, an interactive style among participants and facilitators was more inviting and enjoyable. Even though a great deal of this type of virtual work included some type of performative action, our team also chose to embrace authenticity and encourage parents to come as they were. It is vital for participants to feel comfortable attending in whatever way they were able, especially in a virtual format due to the COVID-19 pandemic, whether that meant while they were cooking and eating dinner, playing with their children, or tending to other aspects of their lives with their video turned off. These parents were willing and able to make time in their busy lives for us; therefore, we wanted to respect that valuable time and participation regardless of what it may have looked like. As a result, engagement and interaction waxed and waned, depending on what participants were able to offer in the moment. We expressed gratitude for whatever level of participation parents were able to provide.

Lesson 4: Establish Ground Rules for Interaction Online

At the beginning of a series of in-person sessions, it is common for group expectations and rules to be established. Our team found it important to carry on this tradition in a virtual setting as well. The family consultants on our team, who served as group facilitators, started by teaching the parents in the group about the functions of the videoconference platform (Zoom). This teaching of Zoom etiquette and functions allowed participants to understand how to operate Zoom and demonstrated facilitator knowledge and understanding of the platform. Pairing the participants' growing understanding of the platform and the rules set in place collectively by the participants and group facilitators led to a universal etiquette that was implemented in the remaining sessions. As an example of this etiquette, after a few instances of audio disruptions from group members, our group facilitators encouraged the use of the mute function if the background noise was distracting. Facilitators started groups using the "mute all" function on Zoom to silence all noise that was not part of the content delivery, establishing a group norm. Once this was widely practiced by group members, the facilitators discontinued the use of the "mute all" function and the parents muted themselves during content delivery. It is important to also remind participants to unmute themselves when they want to talk; otherwise, they will not be heard by the facilitators or the rest of the group. One thing to keep in mind regarding the "mute all" function or establishing a group norm of being muted during content delivery is that it could potentially discourage group discussion or answers from participants. To combat this, we encouraged all group members to unmute themselves when it was time for group discussion. This strategy motivated more natural and organic conversations and discussion.

Lesson 5: Consider Participant Faces and Nonverbal Cues

We also learned the importance of paying attention to the faces and body language of the participants in virtual groups. Building off of a prior point, watching the reaction of participants allows us to gauge how the material is received. For example, we noticed that when a parent in the group wanted to speak, they would typically unmute themselves or lean toward the camera. Depending on the participant, turning their video on may have also been a sign they had something to add. It is the job of the facilitator to provide the space for participants to say what they would like and not accidentally go ignored. This attention to detail can also allow the facilitator to draw on patterns or similarities in the group that can unite multiple reactions and foster a sense of connection among all group members. This attention also places importance on individual participants, their contributions, and their overall presence in the group. Every other aspect of leading the group is harder, if not impossible, if participants' facial expressions and nonverbal cues are not monitored.

Lesson 6: Adapt PowerPoint Presentations

In an in-person group, PowerPoint presentations or other slideshows may be a bit grueling to pay attention to and have the potential to take the focus away from the discussion and group facilitation. Inappropriate use of a slideshow can degrade the quality of a presentation. That said, in a virtual environment we found that the PowerPoint functioned as a centerpiece of the virtual group. The presentation served as the “dinner table” that we all sat around. We found that the PowerPoint is most effective when it is visually appealing, with limited words per slide. We avoided flashy transitions and hard-to-read colors. We recommend including images that are reflective of the identities of group participants and aligned with the content being delivered.

Lesson 7: Prepare Thoroughly Prior to Online Sessions

Another important lesson learned in this virtual experience was the importance of practice. We found rehearsing each session to be important for several reasons. First, it was critical for us to be familiar with and understand the information that we were delivering. This afforded better content delivery and helped identify how much time was being used in certain sections or overall, which can be important if time constraints are present. Practice also helped us master any technical transitions that occurred during the group. In any given session we frequently toggled between sharing the PowerPoint screen on Zoom, sharing videos, and returning to “gallery mode,” which showed all the participants’ faces at the same time, each in a small box. Gallery mode created a sense of group cohesion and made it easier for our team to “read the room” and pick up on the subtle visual cues of the participants. We noticed that discussion was more effective if we were in the gallery mode because it was easier for participants and facilitators to see each other as they were speaking.

Practice also allowed our team to get a feel for what the group meetings would look like for the parents joining the sessions using varied devices (e.g., phones or tablets). Our team found it valuable to know how to navigate the platform on different devices. Lastly, practice sessions can allow facilitators to tailor their content and method of delivery to best suit the group participants. Our team had dress rehearsals each week to practice the content, so the facilitators could anticipate any questions or concerns the parents may have had with the material and navigate the best way to communicate the content in a thoughtful and inclusive way. Although the dress rehearsals took considerable time each week, we noticed that the time was equivalent to the time our team would have spent setting up and cleaning up an in-person group. In the future, we may need to spend slightly less time with dress rehearsals. Admittedly, our team was on a learning curve. In the future, we will already know how to navigate many of the issues that arose in the virtual delivery of our interventions.

Lesson 8: Take Advantage of Technology Tools

Our team attempted to use as many of the Zoom features as possible in the delivery of each weekly session. We used the whiteboard, polling feature, video sharing, and breakout room features. We noticed that toggling between different functions was more stimulating than just looking at the same PowerPoint. Each of the Zoom features, and frequent transitions between features, helped keep the group members engaged.

With that said, it was important to maintain a balance between the presentation of a PowerPoint (or screen share) and the display of the entire group's faces on screen. Although the PowerPoint and other screen share functions are critical to content delivery, we observed that connections were harder to establish among participants when the faces of the group weren't seen. Thus, our team made conscious efforts to frequently switch between screen share and total group mode to encourage conversation and to create a connection among the parents. We were careful to mimic the in-person experience of a group. In so doing, we noted that virtual groups can be a meaningful experience for participants, especially during a pandemic when in-person contact is limited. Our team put in the same amount of time and effort into the content that would go into an in-person gathering and deliver all the content, rather than presenting a more streamlined or limited intervention experience.

As demonstrated, there is a great deal of work done to create a space that resembles an in-person group structure in a virtual setting. While there was careful planning around the group's performative nature and the intricacies of maintaining attention virtually, one of the most notable considerations made by this team was the accessibility and inclusiveness of the group and its content.

Lesson 9: Expand Accessibility and Promote Inclusion

Conducting virtual groups provided an opportunity to expand access and inclusion for families that might have had difficulty coming to an in-person group for various reasons. However, virtual groups also required technology and Internet access with the capacity to run live quality video. Initially, as our team transitioned to an entirely virtual setting, we worried about Internet accessibility for our families living in rural areas. However, we found that Wi-Fi quality and accessibility varied greatly within the urban communities as well. During the assessment phase of the project, we talked with families about their access to technology and the Internet. Our team developed a resource list of programs and community support available to connect families to technology and the Internet. Proactively, our team reached out to families in areas where we thought the Wi-Fi access would be spotty. Most families felt confident they would be able to participate in a live group setting with their current setup. Ultimately, we found that running groups was a better way to understand who would have ongoing Wi-Fi needs. When it seemed that a family was having Internet

struggles, our team reached out to them. First, we would express appreciation for their persistence and commitment to the group. Then, we would ask questions about what might be at the heart of their Internet needs. In most situations, we offered hotspots and covered the monthly service fees for the duration of the groups. Much to our surprise, families living in suburban neighborhoods sometimes had difficulty maintaining Internet connection in the evening. They had a quality hotspot and the best available Internet in their suburban neighborhood. We speculated that their neighborhoods might be experiencing an overload of Internet activity during the pandemic. Our team also offered the phone number to the Zoom session to provide an alternative to accessing the group over Wi-Fi. When a family used the phone number, our team was careful to talk through what was happening in groups while facilitating the sessions to ensure that the person without video could understand what was happening and be included in the group process.

Lesson 10: Create a Website for Easy Access

Our team used two methods to help families connect to the weekly intervention sessions. In our first wave of groups, we emailed families the Zoom link weekly. We also emailed families the links to the weekly check-in, which was filled out before groups, and the weekly evaluations, which was filled out after groups. In addition to sending the links over email, our team sent text reminders for groups and text reminders to prompt families to complete the check-ins and evaluations. Our completion rate with online surveys was similar to (or sometimes better than) our in-person survey completion rate. When our team prepared to do a second wave intervention online, we developed a different method to support our families connecting to the virtual groups, check-in surveys, and evaluations. Our team created a simple password-protected website. The website contained three large buttons that connected the families with one click to the weekly Zoom meeting, check-in survey, and evaluations. Nothing confidential was stored on the website. Links to resources discussed in groups and copies of the PowerPoints used in groups each week were posted to the website as well. This meant that families that had to miss groups were able to access materials and resources on our website. We continued to send text reminders to families during the week, which contained the link to the group website. Our team found that the website led to higher rates of check-in survey and evaluation completion and was easy for parents to navigate. We will continue to use the website for future group delivery.

Lesson 11: Use Powerful Visual Images

As mentioned earlier in the chapter, the PowerPoint played an important role in the virtual group setting. It functioned like the focal point or metaphorical “dinner table” to our gathering. In an in-person setting, group leaders might sit at the front of the

room and there might be an easel with a large pad of paper or a white board. Parents are typically sitting in a semi-circular formation, and it is easy to know what to focus on while the group leader speaks. In the virtual world, the order of boxes with faces in them is different on every screen. This gets further complicated between accessing a virtual group over computers, tablets, and phones. The PowerPoint provides the focal point for the group and is useful when sharing complex ideas or robust content. Since there may be times in the virtual groups experience when the PowerPoint presentation fills the participant's screen, it is important to be very thoughtful about what is on the slides. Powerful visual images tend to be remembered better than other types of information.

Our team found that slides needed to have a balance between images and words. The words on the slide should clarify the content being shared by the facilitator and the images should be relatable. We recommend that facilitators should choose photos that reflect the families in the group. This means including photos that depict families of different racial, religious, and cultural backgrounds. Our group facilitators sought input from team members about the images chosen for the slides to head off any biases that might crop up. The goal is for group participants to see themselves reflected positively in the images on the slides. Overall, the PowerPoint is an outward manifestation of the degree to which the group was created with the group members in mind. Our team also used simple graphs and cartoon illustrations to depict complex topics. One of our group facilitators had a personal interest in cartooning and would draw fun images for families during role-plays using the white board feature in Zoom. Font size and color should be easy to read and see. During one group, a father suggested that a darker font on our slides would be easier for participants to read. We valued this thoughtful suggestion and changed the font color of our slides. This was an opportunity to improve the group experience for everyone and demonstrate that we value the feedback we receive from our families.

Lesson 12: Establish Additional Contact/Outreach

In addition to focusing on virtual delivery, we looked for ways to outreach to each family. Before groups began, we sent the families binders with tabs for all 16 weeks of intervention. We included the agenda for each week and the home activities. In addition, the group facilitators hand-wrote notes of support and encouragement on sticky notes, which were placed throughout the binder. This provided a tangible aspect to the group experience that the parents could interact with weekly. About six weeks into groups, a survey packet was sent to families. Group facilitators collected information about the special interests of the children in each family. Coloring sheets were prepared for each child in the theme of their special interest and included in the survey packet. The spirit of this gesture was to provide an opportunity for the families to see that our team was listening to them and working to create an experience that centered on them. At different times during intervention, facilitators hand wrote thank you cards, notes of encouragement, or holiday cards and sent them

to group participants. Our family consultants also checked in with families over text regularly and called families at scheduled intervals using a brief motivational interviewing tool to enhance engagement and participation.

Group facilitators used the brief motivational interview to prepare families for groups, plan for potential barriers to group participation, and learn family's strengths that might ease participation. Family consultants met with parents to do the first motivational interview during the assessment phase prior to the start of groups. Another motivational interview was completed the week before groups started to provide an opportunity to walk parents through the game plan for groups, check in on any changes in the family or barriers, and answer any questions. Family consultants conducted another motivational interview at the seven-week mark and again at the end of groups. Although we had originally planned to complete the motivational interviews in-person in family homes, we completed these brief interviews over video call or telephone. The length of the motivational interview varied based on parent need, and the content of discussions were tailored to the specific needs of the parents. Our family consultants were thoughtful to stay in contact with families that were struggling to attend group intervention sessions. Our team also reached out to families that regularly attended groups in the spirit of recognition and appreciation.

The motivational interviews offered a great starting point for our team to connect with families. We found it to be important to not just maintain the connection, but to continuously work to grow and strengthen relationships with participating families. Our group facilitators implemented several ways to do so in a virtual setting.

Lesson 13: Welcome Participation

In transitioning to virtual groups, we made it our goal to embrace the inclusive and accessible nature of the online format while striving to create a space that was as close to an in-person experience as possible. We wanted to generate lively discussions, foster opportunities for connection, and keep people engaged and wanting to return each week. We found it more challenging, but not impossible, to create warmth, connection, and the ease of natural communication in a virtual setting. It required us to become adept at reading the subtle cues of our participants and inviting them to contribute when we noticed their heads nodding or a smile in agreement of another's experience. We also explicitly encouraged people to show up as they were comfortable and for some, that meant contributing to the chat box and frequently having their screens off. We modeled keeping our screens on and celebrated people showing up as they were comfortable and able. We had families attend when they were in pain, when they were sick, while they made dinner, as they ate, and as they got their children ready for bed. The virtual format made it easy for them to attend, no matter their stressors. And there were a lot!

Lesson 14: Refer to Parent Principles

We used the strategy of “parent principles” to generate discussion. This strategy is a tool used in the Incredible Years program (Webster-Stratton, 2013) and is designed to reinforce the curriculum and attribute “words of wisdom” to individual participants. An example of this would be if we were teaching about the importance of giving labeled and specific praise and a participant shared how they provided specific praise to their child for cleaning up all their blocks. The next week, when reviewing our “parent principles” slide, we would attribute the principle of using labeled and specific praise to that parent and celebrate and acknowledge them for providing such great wisdom. To do this, each week after our group ended, we would debrief as a team for about five to ten minutes to share the great things we heard, remembered, and thought would be worth celebrating and mentioning the following week. Depending on the size of the group, we would have one to four new “parent principles” to share back the following week. As the weeks went on, our “parent principles” multiplied and we quickly clicked through the slides, only reading the newest principles for that week. Creating “parent principles” requires the group leaders to be especially attuned to the comments and experiences shared by the participants, and it supports parents feeling a sense of ownership while reinforcing the group’s teachings. We creatively embedded “parent principles” that not only reinforced the group content but also emphasized parent strengths, insight, commitment and effort. As we filled up our slides and read the new principles at the beginning of the group each week, it reinforced the message that we are listening, we value what parents have to share, and we want parents to continue participating. It served as a valuable warm-up and refresher, supporting group dialogue.

Lesson 15: Reinforce Participation

To encourage group conversation in an in-person setting, we would have used a treat or prize bowl to reward and incentivize participation. To mimic this concept, we offered specific verbal praise during our virtual sessions. Our team took notice when a parent was the first to share for the night, talked about something positive in their week, posed a thoughtful question, or shared a great idea. We would reward them by naming the great thing we noticed them do and then by changing their Zoom name to something like “Superstar Sam” or “Awesome Alex.” This became a group norm and others began to call out the strengths of their peers and acknowledge them as well. This became a fun way to promote sharing, model the concept of rewards and incentives that we were teaching, and foster group cohesion.

Lesson 16: Acknowledge Birthdays

Our groups met for a total of 16 weeks. Four months is a long time and over the course of our group, we made continual efforts to acknowledge people's commitment to their children, families, and our gratitude for their time. To keep people encouraged and enthusiastic, we asked parents what their children's interests were, and we kept track of both children and adult birthdays and asked permission to acknowledge them in group. In some cases, we changed our virtual backgrounds to honor a child's favorite cartoon or sang happy birthday to make them feel special. It brought big smiles to the screen and invited children into the space, creating a welcoming and warm environment that can be difficult to simulate virtually.

Lesson 17: Incorporate Music

We found ways to bring music into the online space, which lifted peoples' spirits and often naturally invited children to join, dance on screen, and connect with others. We played music in several different ways. We coupled a short song clip when we wanted to acknowledge a participant in a meaningful way. We played a song at the end of group as everyone logged off for the night (our outro music), and we also explored doing a mid-way intermission and incorporated a "wiggle break" halfway through the session. We had staff on our team to help facilitate cuing up the songs but as we became more savvy, we learned we could play a music video and share just the audio, as to still see everyone's faces and allow for others to connect. We modeled the silliness and danced with parents and their children. It softened the formality of a virtual group and fostered connection, joy, and delight. We chose family-friendly songs but also experimented with some dance classics. Every song was a hit!

Lesson 18: Use the "Parking Lot" Metaphor

In reflecting further on how to mimic the in-person feeling in a virtual setting, we concluded that there needed to be more opportunities for the natural, unscripted social connections that are typical of an in-person context. In the virtual setting, we had breakout groups and brainstorming, but we wanted to offer an opportunity for parents to connect with one another naturally. When a group session has ended in an in-person setting, families walk out to their cars and sometimes strike up a conversation with other caregivers in the parking lot. These parking lot conversations organically unfold and are a natural extension of the in-person group environment. Our team decided to simulate the parking lot feeling by creating a virtual parking lot. After the virtual group ended each night, we assigned all the participants to one

single breakout room. We shared the intention behind it and kept it open for five minutes after the group each night. We encouraged those who wanted to connect a little bit longer to stay on and for those who were ready to “get in their car and go home” to sign off as they pleased. It served as an uninterrupted, informal space for parents to connect without the presence of facilitators. This was a great success. In fact, we even had people request more time in the “parking lot” so we extended the breakout room to ten minutes. Our team stayed on in the main room so that participants could pop back in with any question or issue they had, but often we noted that parents would simply leave the “parking lot” and “drive home” at the end of the evening without returning to the main room. This setup worked well for the families we served. Many people, especially after the pervasive isolation of the pandemic, were yearning for connection and joined the group hoping to feel less isolated in their parenting and human experience. Responding to that desire and striving to create connection and a positive experience in parents’ lives, we brought ideas like this into the space and people tended to respond very positively.

Lesson 19: Show Appreciation to the Co-facilitator

We previously stated that co-facilitation is a key ingredient to leading a successful group. Our team found that when we expressed a genuine appreciation of our co-facilitator’s strengths and modeled a functional working relationship with the co-facilitator, we demonstrated what cooperation and collaboration looks like for the families we supported. Expressing a genuine appreciation for your partner/co-facilitator goes a long way in conveying a positive approach to teamwork. Beyond expressing appreciation of the co-facilitator’s strengths, we also used humor and honesty to lead participants through the session content.

Lesson 20: Bring Skills and Talents to Each Session

Finally, we found that sessions became more enjoyable and engaging when our group facilitators brought their special skills and talents to the sessions. For example, one group leader connected with bilingual participants in their native language. Our tech support team members used their extensive online music libraries to find fun playlists for the break and outro music. Every member of the team had a talent or skill that they used each week in our group sessions. Our goal was to make each session engaging and genuine for families, while at the same time sticking to the agenda and script for content delivery.

Conclusion

Our team had intended to deliver in-person behavioral parent training and stress reduction interventions to parents/caregivers of preschool-aged children with developmental delays and disabilities; however, the pandemic introduced challenges to gathering in-person. Although delivering our interventions remotely was certainly a “Plan B” and not our first choice for this clinical research program, we consider ourselves fortunate to have had the experience of pivoting to remote delivery of the intervention package. We now recognize the myriad advantages that a telehealth delivered group parenting intervention can offer. The field of early childhood education and family supports needs the full range of intervention options to maximize benefit, access, and inclusion. The hope is that our experiences and lessons learned may encourage others who are struggling with if (or how) to deliver family-centered interventions remotely. Although this chapter reflects a personal account of our team’s experience, research is needed on efficacy of our approach and the relative efficacy of remote versus in-person delivered group interventions. Our research project is ongoing. As a result, we do not yet have data on child or parent outcomes; however, preliminary data suggest feasibility and satisfaction with the telehealth delivery (see McIntyre et al., 2021). The practice of telehealth parenting interventions for young children with disabilities is an emerging area of research that holds promise for addressing the needs of families and children, particularly in challenging situations and times of crisis.

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Part IV
Caregivers, Teachers, Administrators,
and Teacher Education

Chapter 15

The Effects of the COVID-19 Pandemic on Family Child Care Providers: Insights from a Rural US State



Patricia Hrusa Williams and Donna Karno

Before the COVID-19 pandemic, over a million children under five years of age were cared for in home-based, family child care (FCC) settings (National Survey of Early Care and Education Project Team, 2016). Home-based family child care is a popular option for families with young children, especially in rural areas, with almost one-third of infants and toddlers cared for in home-based settings (Paschall, 2019). Many parents prefer family child care settings for their small size and the opportunity it provides for more personal attention (Jessen-Howard et al., 2020). Cost and accessibility are considerations in rural areas (Anderson & Mikesell, 2019), with home-based care being more affordable and more prevalent than other forms of care.

However, the same factors that make family child care popular within the United States also make these programs vulnerable (Gerstenblatt et al., 2014; Herman et al., 2021), especially during COVID-19. Family child care providers have fewer available supports, both financial and professional, lower budgets, and less infrastructure support needed to meet public health mandates (National Association for the Education of Young Children, 2020a, b, 2021). The more personal nature of the relationships built between providers, families, and children (Herman et al., 2021; Layzer & Goodson, 2006) may also lead providers to feel more pressure to stay open to serve parents with whom they have developed relationships and commitments, especially if they serve essential employees. Home-based providers also often juggle caring for their own children while providing child care to others (Morrissey & Banghart, 2007); this was complicated by stay-at-home orders, which have closed their own children's schools.

In rural areas, family child care is the primary form of care available in communities (Anderson & Mikesell, 2019), serving families with limited financial, medical,

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and educational resources at their disposal. Since home-based programs are the primary means of care for infants and toddlers in the United States, providers experienced increased caregiving demands and risk of infection for the very young children they served during the COVID-19 pandemic. The pandemic not only threatened providers' emotional and physical health but also their economic well-being. Closures produced a loss of income, while staying open brought with it challenges in purchasing additional safety and sanitizing equipment necessary to keep them and children safe.

Closure rates for home-based and family child care programs have been increasing, with a loss of almost 100,000 programs from 2005 to 2017; 52% of these closures were for small family child care programs (National Center on Early Childhood Quality Assurance, 2020). Factors associated with closures include job demands, low and unpredictable compensation, lack of respect for their role as business owners and educators, high costs of housing and insurance, and difficulties in meeting new and changing regulations related to health, safety, and program quality (Morrissett & Banghart, 2007; NCECQA, 2020). Hence, the coronavirus crisis is likely to exacerbate an already fragile home-based family child care system.

Chapter Overview

The goal of this chapter is to examine the experiences and challenges faced by family child care providers, both before and during the COVID-19 pandemic. Factors associated with family child care closures include financial, job-related, and family stressors. Data from an online survey will be utilized to understand how the pandemic has affected program operations, the stresses experienced by providers, and the support needed to maintain programs within communities in a rural state. The data from this study will be put in the context of the existing literature to explore the strengths, challenges, and ways family child care providers remained resilient in the face of COVID-19. Systemic, infrastructure, and policy supports to strengthen states' FCC system after the pandemic will be considered.

Background

Family child care providers face a myriad of challenges in their work. Among those faced by home-based caregivers include threats to their livelihood, including increased rates of closure over the past 20 years. They also experience a variety of unique job-related stressors, given the intersections between home and work. This can make it difficult for family child care providers to maintain boundaries between their home, family life, and outside caregiving responsibilities. These stressors have been compounded by the additional stressors brought on by the COVID-19 pandemic, which has fundamentally changed the nature of American life.

Factors Associated with Family Child Care Closures

In 2020, the National Center on Early Childhood Quality Assurance (NCECQA) studied family child care program closures and discovered that the decline in programs has been occurring for a number of years. From 2005 to 2017, there was a 52% closure rate for small programs (defined as a single caregiver), with only a modest increase (7%) in large programs (defined as two or more caregivers). Why are family child care programs closing? Research summarized by NCECQA (2020) reports that the lack of benefits such as health care and retirement is a key factor. Other business-related concerns are also important. For example, FCC owners often lack business experience, which leads to late payments, uncollected revenue, and vacancies (Herman et al., 2021). These financial issues are exacerbated by what are typically lower tuition rates charged to families, as well as what can be high insurance costs and licensing fees (deLutio, 2020; NCECQA, 2020).

There are non-financial reasons for closing such as work hours that can be longer than center-based care (because of flexible hours of operation) and having the workday extended due to business-related tasks (i.e., billing, cleaning). Job demands on home-based providers can be burdensome to their families, creating challenges in finding work/family balance (NCECQA, 2020). Finally, family child care providers retiring out and not being replaced with new providers and programs is a reason for their declining numbers (NCECQA, 2020). Swartz et al. (2016) found that home-based providers who were under greater psychosocial stress had a greater likelihood of considering leaving the field.

Role of Job-Related Stress

Family child care providers report numerous areas of stress related to their jobs. Research studies (Fernandez et al., 2018; Gerstenblatt et al., 2014) found parent disrespect toward home-based providers as professionals to be a source of stress. One identified indicator of a lack of respect was being labeled a “babysitter,” as opposed to being looked upon as a child care/educational professional. A second area of stress frequently singled out was parental disregard for boundaries, specifically inconsistency in dropping off time, unannounced absences, and not respecting the program’s closing time. A third parent-related stressor was a perceived lack of support from parents relating to maintaining consistency in their approach to caring for the child (Gerstenblatt et al., 2014; Herman et al., 2021).

Challenges also exist because providers’ homes are used as public spaces. This can lead many to experience stress and a sense that their home is constantly under scrutiny, not just by parents but also licensing. The balance between home/work stresses also arises because this same space is shared with providers’ families. The separation of physical space during the day is challenging (Gerstenblatt et al., 2014; Herman et al. 2021; Hooper, 2020). In addition, home-based providers report stress

due to role conflict. Fernandez et al. (2018) found that family child care providers viewed themselves as teachers, social workers, caregivers, and business owners, leading to role overload.

Caring for Family While Caregiving

Morrissey and Baghart's (2007) review of family child care in the United States reported almost one-third of family child care providers care for their own children while working as child care providers for others' children, with 90% of them parents themselves. This brings with it role conflicts between parenting and child care provision. They may feel guilty taking time and space in their home away from their own children, as well as managing child care coverage when their own children are ill or have other needs that need to be met (Herman et al., 2021).

Additional Stressors Due to COVID-19

The well-being of early care providers is determined by more than job- or site-related stressors; it is influenced by "individual, relational, work-environmental, and sociocultural-political aspects and contexts" (Cumming & Wong, 2019, p. 276). Hence, COVID-19 has brought with it unique and dynamic challenges for not only family child care providers but also families and children.

National surveys conducted by the National Association for the Education of Young Children (NAEYC) (2020a, b, 2021) highlight the challenges for family child care and the profession overall. Home-based programs were more likely to stay open during the pandemic than child care centers (75% vs. 50%). While enrollment in family child care programs was slightly higher than center-based care (75%), daily enrollment dropped by as much as 60%. Enrollment losses and drops in attendance translate into financial losses, with 43% of home-based providers opting to not charge parents during program closures or when they do not attend. Survey data show that more than 75% family child care providers found themselves taking on debt, with child care programs in rural areas especially vulnerable; one in three reports that they were saved from closure only by receiving state or federal relief funds. Additional costs for cleaning supplies, personal protective equipment (PPE), staff costs, and losses in revenue due to decreases in overall attendance and daily attendance are to blame.

Besides the business challenges they faced, providers also found themselves working with families and children experiencing never before encountered stresses and strains. Prime et al.'s (2020) review of the literature highlights many of the challenges. In their framework, social disruption through job loss, financial strains, and instability, as well as isolation and disruption in support networks due to confinement threaten both child adjustment and caregiver well-being. Barnett et al.

(2021) discuss how with a lack of traditional social–emotional supports available, both caregivers and children may have experienced greater and varying levels of emotional distress, anxiousness, and trauma. These circumstances led to increased risks for mental health issues, especially for boys (Browne et al., 2021), and challenges in children’s behavior, including an increase in internalizing and externalizing behavior problems (Egan et al., 2021). Hence, it is likely these issues influenced family child care providers’ work with children and their families as everyone adjusted to the “new normal.”

Research Questions

While the number of family child care providers has been in decline, the review of literature highlighted the multiple factors that have contributed to closures, including job stresses and strains that are personal, financial, and family related. Over and above this, the multifaceted challenges of the epidemic have led one-third of early childhood professionals to consider closing programs or leaving the profession (NAEYC, 2020a, b, 2021). Hence, this study explores the following:

1. How has the COVID-19 pandemic affected family child care program operations, capacity, and risk of program closure?
2. What job-related stressors have been most challenging for home-based family child care providers, both before and during the COVID-19 pandemic?
3. What supports have been most valuable for providers during and as they navigate the COVID-19 pandemic?

Methods

This study utilized an online survey of family child care providers in an upper New England state. The survey questions asked respondents about their everyday stresses as child care providers and how the COVID-19 pandemic influenced the types and level of stress experienced. Consent was obtained via participants reading a script and then agreeing to participate by clicking a check box formatted by the survey host. The survey took approximately 15–20 min for providers to complete.

Participant Recruitment

Family child care providers were recruited in a variety of ways. Child care provider professional networks and family child care organizations in states were asked to disseminate the survey to providers in their network via email and social media posts. Emails sent to family child care providers introduced the project and contained

a link to the informed consent and online survey. Data were collected from mid-May to mid-June 2020. During this time in the pandemic, the state had mandated the closure of all businesses except those identified as essential; family child care was identified as an essential service.

Participants

During the month-long period the survey was open, 161 family child care program owners responded to the survey; this represents 20% of family child care providers in the state. In addition, 16 employees of family child care programs responded to the survey. Most providers were in rural (59.1%) and suburban areas (31.2%); far fewer were in urban (8.4%) or other areas of the state (1.3%). The majority of providers who responded to the survey had some college or a Child Development Associates (CDA) credential (34.3%) or held a college or graduate degree (45.5%); less than a quarter of respondents held a high school degree (20.2%). If providers held a college or graduate degree, 65.9% did not have a degree in early childhood education. The average age of providers was 49.1 years (range = 20–70 years) and their average years of experience in family child care was 8.4 years (range = 0.5–48 years). Of the providers surveyed, 51.7% reported being parents of a child who lives in their home; an additional 10.8% reported caring for a relative or another adult, in addition to their work as family child care providers.

Survey Questions

Demographic Information FCC providers were asked a variety of demographic questions on their employment, education, years of experience, age, the location of their program, and licensed versus current capacity by child age.

COVID-19-Related Changes in Programming and Capacity Several questions related to the effect of the COVID-19 pandemic on program operations and capacity. They were taken from Morning Consult and the Bipartisan Policy Center's (2020) nationwide survey, which examines child care operations during the COVID-19 pandemic. Questions examined program closures, tuition policies, plans for reopening, and how pandemic-related policies and factors influenced child care operations. Family child care providers responded to both closed- and open-ended questions.

Provider Stressors Provider stress pre- and post-COVID-19 pandemic was assessed using questions from the Child Care Worker Job Stress Inventory (CCW-JSI) (Curbow et al., 2000). Eight questions on job demands were included, examining challenges in working with children, families, compensation, and their working conditions. These questions were rated as to how often providers experienced challenges in these areas, rated on a scale from 1 = rarely/never to 5 = most of the time. Six questions examined

the amount of control family child care providers and teachers felt they have in doing their job, including things related to their compensation, caregiving responsibilities, and work hours. These questions were rated as to how much control they perceive to have in these areas, rated on a Likert scale ranging from 1 = very little to 5 = very much. Respondents were asked to rate these two sets of questions twice, once regarding how they felt prior to the pandemic and once during the COVID-19 pandemic.

COVID-19 Provider Supports Four questions were asked about financial and non-financial support for family child care providers during the COVID-19 pandemic. One question provided respondents with a list of 12 local, state, and federal programs and resource options, allowing respondents to select as many as appropriate. The list of programs and resources were developed using the Morning Consult and the Bipartisan Policy Center's (2020) nationwide survey. There were three qualitative, open-ended questions that asked respondents to provide information about financial and non-financial support for immediate and future needs. The three open-ended question responses were individually examined for common meanings through multiple reviews of responses. During the data collection period, researchers met informally to discuss preliminary findings (Castle, 2012). At that time, researchers shared their ideas for clusters of meanings, based on respondent common language (Creswell, 2012). This procedure allowed the researchers to create rough groupings, collapse and combine those groupings, and to design response categories for data analysis.

Results

Changes in Program Services, Operations, and Capacity

COVID-19 brought with it dramatic changes in the employment status and program operations of family child care providers. Figure 15.1 shows changes in providers' employment, pre- and during the COVID-19 pandemic.

Almost 30% of providers became unemployed; there was also almost a 50% loss in full-time work for providers due to unemployment, furloughs, and the need to move to providing care part-time.

Unemployment and furloughs led 33.6% of programs to close; those that remained open often changed who they served and the hours they were open. Figure 15.2 shows the percentage of providers who enacted changes in their program operations during COVID-19.

While 66.4% of providers remained open, only 41.8% of them were open as usual. The remainder experienced changes in their operations including serving fewer children and for more limited hours. Of those providers who closed, almost one-third reported being unsure or did not think they would reopen. Almost 40% of providers reported the pandemic has made them reconsider working in family child care.

Fig. 15.1 Employment status of family child care providers during COVID-19 pandemic

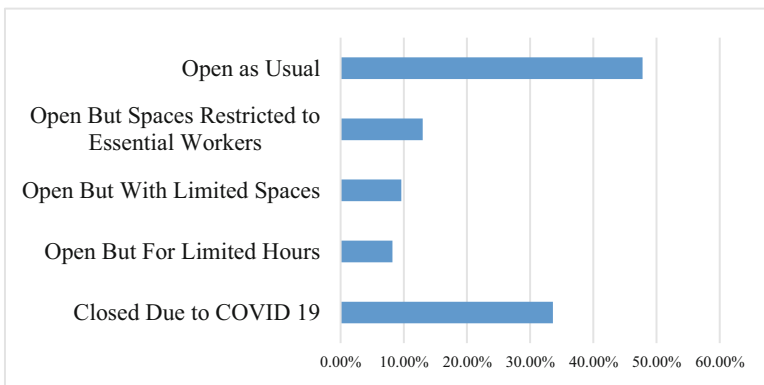
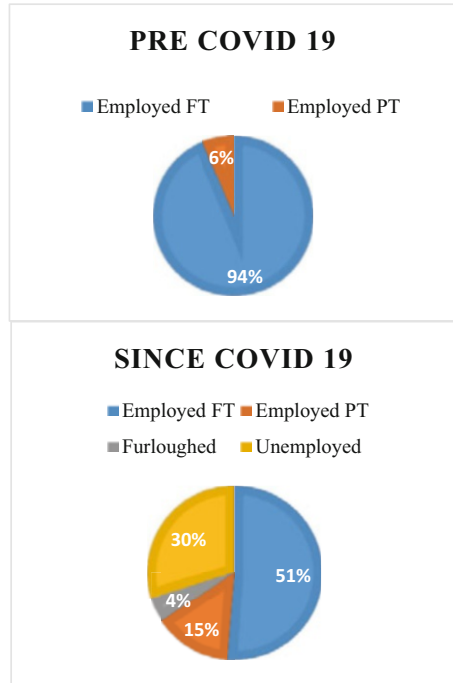


Fig. 15.2 Changes in family child care program operations during COVID-19

Changes in the employment status of providers, coupled with changes in program operations, led to changes in program capacity and the number of children and families served. Figure 15.3 displays the average number of families and children served by providers pre- and during COVID-19.

As can be seen in Fig. 15.3, providers typically served half the families they normally would during the pandemic. They also served half the numbers of toddlers, preschoolers, and school-aged children than they would normally. Overall, the number of children served by family child care providers was down from 1499 to 719; this means half of child care capacity was lost.

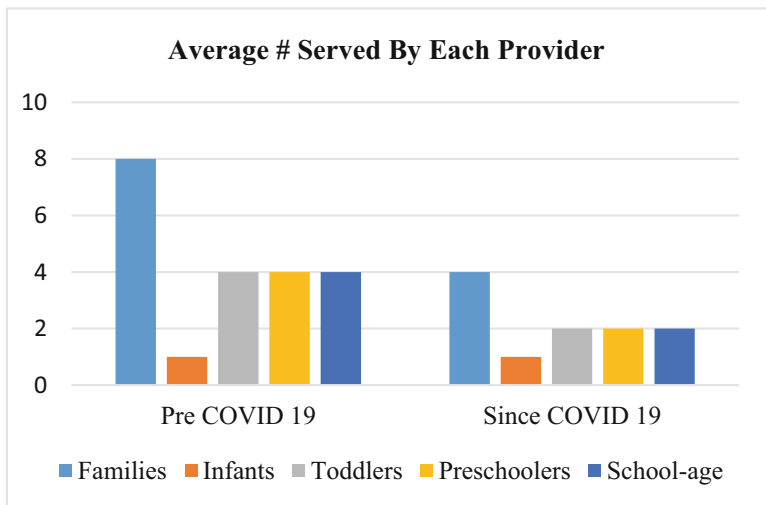


Fig. 15.3 Child care capacity changes resulting from COVID-19

Table 15.1 Stressors experienced by providers pre- and during the pandemic

Stressors providers experienced frequently or most of the time...	Pre-COVID-19	Since COVID-19
Major sources of stress in children’s lives they can’t do anything about	12.2%	34.1%
Children with behavior problems that are hard to deal with	11.4%	20.2%
Parents who bring in children who are sick	32.1%	10.9%
Feeling I should be paid more for what I do	62.1%	65.6%
Feeling I have to be both a friend and business person with parents	65.7%	63.4%
Buying supplies out of my own pocket	71.2%	68.0%
Working long hours	80.0%	72.1%
Looking after the needs of my own children while working	32.0%	33.6%

Challenges Experienced by FCC Providers During the COVID-19 Pandemic

The Child Care Worker Job Stress Inventory (CCW-JSI) (Curbow et al., 2000) was used to examine challenges associated with the job demands of family child care providers. Responses to the eight questions, utilized pre- and since the pandemic, are displayed in Table 15.1.

Some of the challenges providers experienced were pervasive, even before the pandemic. They include concerns about compensation, buying supplies, work hours, and role conflict. However, the pandemic brought with it new challenges, especially in the areas of helping to manage child stress and behavioral problems.

Table 15.2 Areas providers feel they had little or no control pre- and during the pandemic

Areas providers felt they had little or no control over. . .	Pre-COVID-19	Since COVID-19
The availability of supplies	7.9%	63.2%
How much they're paid	15.8%	55.2%
The number of children they care for	13.2%	50.8%
The ability to take time off from work	34.5%	60.2%
The ability to cut back on their hours	52.9%	67.2%

With the switch to remote learning, many providers found themselves taking on new roles, such as supporting preschool and school-aged children in completing their academic work during caregiving hours. As one provider stated:

One of the biggest problems that I personally have had is doing all the different grade levels work. All my parents are working full time, so I am trying to help with the homework.

The CCW-JSI (Curbow et al., 2000) was also utilized to examine the amount of control family child care providers and teachers felt they had in doing their job. Responses to the six questions, utilized pre- and since the pandemic, are displayed in Table 15.2.

Across all areas surveyed, providers felt a loss of control with changes brought on by the pandemic. However, a feeling of a loss of control related to how much they are paid and the number of children they care for almost quadrupled; concerns about their lack of ability to take time off from work also doubled. The area in which they felt the greatest loss of control surrounded the availability of supplies, given shortages, supply chain issues, and rationing in stores that occurred during the pandemic.

Providers' comments speak to the complexities of the stresses they experienced and their perceived lack of control surrounding their family and work decisions. As one noted:

Families are afraid to send kids or are not working and don't need to. I know I didn't feel right asking for payment and I can't afford to work for just a family or two. [I have] fear for exposing my own family. Childcare is a very difficult scenario to keep safe.

Resources Sought by Providers

Providers were asked both closed- and open-ended questions about the supports and resources they utilized and needed during the period from mid-May to mid-June 2020. This was during the early stage of the pandemic and advent of many governmental programs to address the needs for information and financial support for those left unemployed or underemployed by the pandemic. Figure 15.4 displays the local, state, and federal programs and resources family child care providers tried to access during this stage of the pandemic.

As the figure shows, over 50% of providers surveyed did not try to access any of the local, state, or federal programs and resources available. Of those accessed, financial resources were most prevalent, usually at the local or state level (state unemployment, state Child Care Development Block Grants, and parent payment policies). However, it is notable that 66.7% of providers did not attempt to stabilize

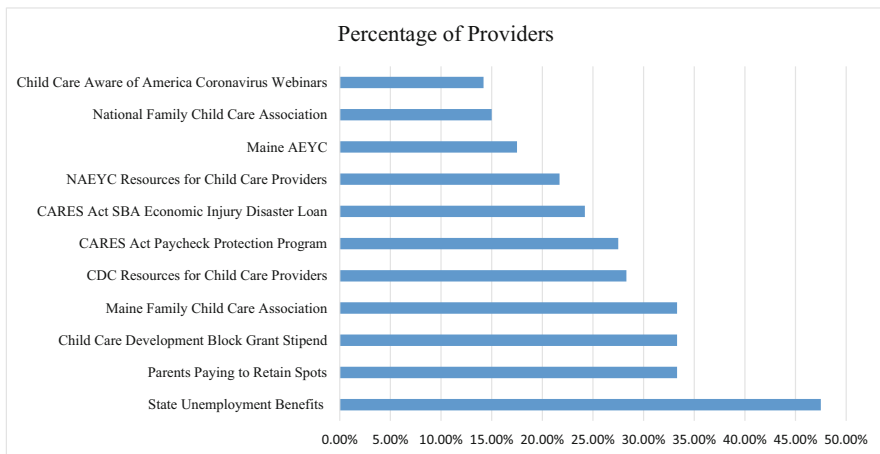


Fig. 15.4 Programs/resources providers tried to access

their financial position by charging parents to retain spots if they needed to close, limit their hours, or serve fewer children; they instead utilized outside sources such as unemployment benefits.

Informational resources provided by the state family child care organization were used by one-third of providers; however, less than one-quarter of providers tried to use the state Association for the Education of Young Children (AEYC) as a resource. The resources provided by the Center for Disease Control and Prevention Expand (CDC) for child care providers were the second most frequently used informational resource.

Qualitative comments focus on the role that financial and business resources played for family child care providers. Of the 119 providers who left comments, 51% specifically mentioned accessing the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), 33.6% the Child Care Development Block Grant Program, and 47.9% unemployment. Providers indicated that these funding supports were critical in their ability to pay their bills. The loss of revenue was the most frequently mentioned challenge, resulting from the reduced enrollment of children or parents who were unable to pay for care. One succinct response *“PAY!!! Keeping kids coming back. Parents don’t want to send them,”* encapsulates this repeatedly expressed challenge. As another stated:

I feel the state has been helpful, loosening the guidelines for CCSP funding, waiving parent fees, the stipend we received. However, we are going to need a lot of support as we start to reopen. I’m not sure what the plan is to help providers move forward.

Qualitative comments also highlighted the importance of local networks, family child care-specific resources, and communities of practice for support. State licensing providers were identified as a crucial non-financial support by those programs that remained open. Early childhood professional organizations on the state level (i.e., state Family Care Association, state National Association for the Education of Young Children, and communities of practice) were identified as important non-financial supports. Several respondents identified specific individuals within

these organizations as particularly helpful. One respondent shared: *“The (state) Family Childcare Association has been a wealth of knowledge and support. [name of contact] has also been great with business webinars and answering questions.”*

There were a group of respondents who felt there had been a lack of support by state government and non-governmental organizations. Responses often did not provide additional information beyond stating “none.” When asked what (financial and non-financial) supports were needed to survive and thrive in the next year, the responses strongly indicated financial support from the state and federal governments. This need was connected to the inability of families to pay or them keeping children out of the program, thus reducing attendance.

Two other challenges reported were related to the COVID-19 cleaning procedures that were government mandated for health and safety: (i) finding the cleaning and personal protective equipment (PPE) for purchase, and (ii) the amount of time required to implement the health and safety procedures. There were shortages in stores of needed cleaning and PPE supplies, making it difficult for the FCC providers who remained open. The additional health and safety procedures required additional time and effort. Providers reported that during the day, time was shifted away from caring for children to cleaning and disinfecting; after hours, their workday was extended for additional cleaning and disinfecting. One family child care provider shared the following:

Finding supplies and staying stocked up on them has proven difficult. . . . we are taking 2–3 hours after daycare closes to disinfect and clean all items and surfaces that children touch making our normal 12-hour day into a 15-hour day. It’s exhausting.

Providers were concerned about losing contact with the children in their care. One respondent was saddened because she was unable to say goodbye in the way she would have liked. The challenge was framed as missing families and children because the provider loves the work. Non-financial support identified as crucial to move forward included help to obtain health and safety supplies, greater recognition for remaining open, and better communication from the state about guidelines. There were also respondents who stated they just wanted the state to reopen. They also feared for the future of family child care in the state, with one stating:

I feel like we are going to have a lot less daycare providers in the state when this is all over with, I worry about where the children are going to go for childcare and if the parents will be forced to choose sub level childcare because that is all that will be available and what that will do to the licensed child cares left in the state.

Discussion

The results from this study of FCC providers in a primarily rural state show the severity of the impact of COVID-19 on them during the early stages of the pandemic. New stressors, especially those related to finances, child stress, program operations, and supplies, emerged. Long-standing challenges, such as those related

to role conflict and feeling appreciated for the work they do as professionals (see Fernandez et al., 2018; Gerstenblatt et al., 2014; Herman et al., 2021; Hooper, 2020), remained ongoing challenges. Their families, work, and livelihood were affected by the constantly changing landscape of information and conditions, leading to instability and unpredictability during the initial stages of the pandemic, dynamically affecting multiple aspects of their personal and work-related well-being (Cumming & Wong, 2019). These findings are put into the context of the existing literature. Ways to strengthen state family child care systems after the pandemic are also considered.

COVID-19 and Existing Stressors

Research (Morrissey & Banghart, 2007; Fernandez et al., 2018; NCECQA, 2020) prior to COVID-19 indicates that family child care programs close due to financial (i.e., low compensation, enrollment difficulties) and non-financial stressors (i.e., lack of respect, role overload). Respondents in this study confirmed that before COVID-19, the major stressors in their work included compensation, long work hours, parents bringing in sick children, and fulfilling the needs of their own children. During COVID-19, these stressors remained, except for parents bringing sick children to child care. This is the one area where health and safety policies, which may have felt restrictive and challenging to providers (Porter et al., 2020), also served to protect them, their families, and children in their care to keep them safe.

Prior to the pandemic, providers felt they had much greater control over their compensation and enrollment decisions. In our rural state, the challenges related to program operations, finances, and enrollment were particularly salient and affected family child care providers' fiscal well-being. Work by NAEYC (2020a, b, 2021), collected nationally at approximately the same time in the pandemic as our data, suggests some trends specific to our rural state. Programs in our northern New England state had a lower rate of staying open than that found in national studies (66.4% vs. 75%); they also experienced a greater loss in child care capacity (25% capacity loss vs. 50% capacity). Also, while nationally 57% of family child care providers charged families to retain slots or when children could not attend, providers in our state were far less likely to do this (33.3%).

All these factors likely contributed to the almost 40% increase in reported concerns about compensation. In making sense of this, it is important to consider attributes of child care programs in rural states that work to disadvantage home-based providers, including family reliance on family, friend, and neighbor care and lower cost structures for providers in these areas (Anderson & Mikesell, 2019). Loss in capacity may have resulted from families turning to informal care networks during the pandemic, both to save money and stay within small family "bubbles." Fear of loss of families, now or down the road, may have made family child care providers reluctant to stress the relationship by asking for additional compensation.

COVID-19 and New Stressors

Two major new stressors reported in the quantitative and qualitative results were increased health and safety procedures/concerns and the difficulty in obtaining supplies, including PPE. Home-based providers experienced significant stressors due to state-mandated health and safety procedures and challenges in acquiring PPE. In the early days of COVID-19, there were widespread shortages of many items in the general population, exacerbating an already stressful situation. One respondent reduced the issue to “*Loss of income, worried if I might run out of masks, hand sanitizer, cleaning supplies, getting ill myself.*”

Porter et al.’s (2020) work highlights the multiple ways these challenges affected family child care providers. Mandates raised issues as to how safe it really was for providers to continue to welcome families into their homes and put them in contact with their own families. The requirements also raised program costs at a time when enrollments lowered, and tuition revenues dropped. Providers also experienced role conflicts between home and work as they spent hours cleaning and sanitizing after hours to prepare for the next day. There is also a question as to how sanitizing and cleaning measures may have influenced the quality of care providers may have been able to provide, as they were spending portions of their day with children carrying out additional cleaning regimens.

Study Strengths and Limitations

This leads to some considerations of the strengths and limitations of this study. While this study examined the reported experiences of family child care providers, it did not examine the quality of care provided by home-based providers, whether they were involved with the state’s Quality Rating Improvement System (QRIS), or their QRIS rating. Hence, this would be an area to explore in future research. Providers with greater training or professional resources may have experienced the pandemic differently and potentially may have been more likely to manage the stress of the COVID-19 pandemic better.

Since established networks for child care and family child care providers were used to recruit study participants, it is also likely we may have oversampled providers with greater linkages to formal systems of support such as the state’s family child care association. Our findings may also more accurately reflect the experiences of licensed providers versus those providing family, friend, and neighbor care to young children. Future research is needed to understand the experiences of those who have been engaged in these informal caregiving networks.

This study’s findings are also limited to the timeframe during the pandemic when the data were collected. Our study was conducted during the early stage of the shutdown in the United States, from mid-May to mid-June 2020. While our state had much lower COVID-19 rates than many other areas of the country at the time, the

state followed national trends related to fairly strict mask mandates, social distancing requirements, and closure requirements. All businesses, except those identified as essential such as family child care, were closed. Hence, provider stresses may have changed as the state began to reopen, day-to-day restrictions were lifted, case counts increased, and vaccinations became available for some groups.

Despite these limitations, this study has many strengths. The sample size reflects 20% of the licensed providers in the state. The study examined acute stressors experienced during a very challenging time in the pandemic. The participants studied also were diverse sample in terms of their age, location in the state, education, and experience in the field.

Implications and Needed Supports

In looking at the supports important to family child care providers, several themes emerge. First, many providers seemed to lack access to needed supports, with 50% of providers not attempting to access a wide range of local, state, and national supports for providers. Many in their qualitative comments felt none of the supports were helpful, with one summing it up by stating, *“There is no support for family child care. The state forgot about us during this time, telling us we were essential but provided us with nothing.”* Hence, it is vital as we move forward to not let the focus on child care be exclusively related to center-based and public-school-related settings and concerns. Family child care is a unique form of care and as such, we need to attend more fully to providers’ and families’ needs, challenges, and preferences.

Second, financial support was incredibly important and remains so. Published work on family child care highlights the administrative and financial management challenges providers encountered, notwithstanding new issues that come with a pandemic (Gerstenblatt et al., 2014; Herman et al., 2021). Financial supports in the form of CARES Act and state unemployment benefits were reported by respondents as critical in their ability to remain open for those parents who needed care, and for those FCC providers who closed as they considered the viability of reopening. Loss of revenue was abrupt and came with unexpected costs involving PPE and health and safety measures. Financial supports were viewed as essential.

Finally, the importance of non-financial supports, especially through personal connections, was also critical to the home-based providers who remained open. There was reported confusion regarding COVID-19-specific rules, especially those emanating from the CDC and state government. Here is where the state licensing specialists, communities of practice, and the state Family Care Association became positive resources for the providers. Porter et al. (2020) notes the challenges that FCC providers experienced in understanding complex documents on financial programs and state guidelines as they are a diverse group in terms of their educational, cultural, and linguistic backgrounds. Large-scale presentations of this information via Zoom did not seem as helpful as the personal connections family child care professionals had with licensers and those connections they made with local and

state agency staff. Family child care, by nature, is a more personal and intimate form of child care (Gerstenblatt et al., 2014; Jessen-Howard et al., 2020). It is not surprising then that the providers themselves tend to prefer making more personal connections when seeking their own assistance.

Personal connections were also important because during this time providers, families, and children experienced transitions in and out of child care. With this, some providers felt a sense of loss when children abruptly left their care. These abrupt, unpredictable, and often long-term transitions also produced challenges to children's adjustment and well-being (Barnett et al., 2021; Egan et al., 2021). Hence, it will be crucial in the future for states and localities to consider this more in developing plans to close and reopen child care programs. Routines and playful transitions are vital to creating some sense of stability, predictability, and continuity as we weather other potential challenges related to COVID-19 that may lie ahead.

Conclusions

Family child care is a crucial, yet often unappreciated resource in the fabric of many state and federal child care systems. Closure rates for small programs, which are common in rural areas, were 52% even before the COVID-19 pandemic (NCECQA, 2020). With the pandemic, rates of temporary closures were 27% nationally (NAEYC, 2020a, b, 2021) and 33.6% in our rural state, with more than one-third of family child care providers considering leaving the field permanently. Hence, it is vital to consider how to better support family child care providers as the COVID-19 pandemic evolves, bringing with it new and different challenges.

Our work highlights FCC providers' increased vulnerability and specialized needs for support. Assisting and supporting providers with business and financial questions and challenges, especially using personal connections, is key. Recognizing the fundamental work providers do to help parents and families access employment in their communities, especially in rural areas, is necessary. Developing strategies to meet not only their financial but also their psychosocial needs is an urgent need if we hope to rebuild family child care programs and strengthen the profession.

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Chapter 16

Black Family Childcare Providers' Roles as Community Mothers During the COVID-19 Pandemic



Crystasany R. Turner

"I just stayed open because I had parents that still had to work. Where will their kids go? They probably would lose their job," said Ms. Sherice, a 57-year-old Black woman family childcare provider as she explained why she chose to remain open to serve the children of essential workers in her community. Ms. Sherice had served as a family childcare provider for 38 years and was not going to stop because of a pandemic. Similarly, Anya, a 35-year-old Black woman, who founded her program just one year prior to the onset of the pandemic, stated, "I didn't want to close unless I had to. I know that the state, at one time, was still allowing the pay;

But I knew my families still needed me." Like Ms. Sherice, Anya knew her childcare services were a critical factor in determining whether the parents of her program could fulfill their roles as essential workers.

Despite being disregarded by a larger society as essential workers, this study illustrates the agency and sense of accountability Black women care providers engaged as vital resources within the Black community. The Black women family childcare providers' (FCPs) take-charge attitude and sense of collectivism illustrate their roles as community mothers. This inquiry into the experiences and perspectives of the FCPs was guided by the following question: How can the cultural knowledge and cultural capital of Black women family childcare providers be described as they reacted and organized to support young learners and their families during the COVID-19 pandemic?

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Background

The following section discusses the epistemic foundations of Black women educators and care providers and the theoretical framework that guided the study.

The Epistemic Foundations of Black Women Educators and Care Providers

The construction of Black women's cultural knowledge is rooted in their shared history of struggle and creative resistance to oppression and community hardship (Collins, 1989; Davis, 2018; Dillard, 2000; Majors, 2004). Although numerous studies show that Black cultural knowledge has a significant positive effect on child development, Black women early childhood educators and their worldviews have often been left out of discussions of policy, curriculum, and practice (Boutte & Strickland, 2008; Delpit, 1997; Ladson-Billings, 1994; Milner, 2007).

As “mothers, othermothers, teachers, and churchwomen in essentially all black rural communities and urban neighborhoods, U.S. black women participate in constructing and reconstructing [their] oppositional knowledges” (Collins, 2002, p. 13). As a part of their deep culture, Black women's funds of knowledge are “historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being” (Moll et al., 1992, p. 133). With this, it has been long understood within the Black community that Black matriarchs are the keepers of cultural tradition, and it is their responsibility to extend this knowledge to the next generation—whether in the home or in the classroom (Bernard & Bernard, 1998; Collins, 2016).

For centuries, Black women care providers, mothers, othermothers, and teachers have fought to educate, care for, and sustain the Black community throughout times of economic and social hardship (Collins, 2002; Dougherty, 2004; Roberts, 2010; Tuominen, 2003). In the late nineteenth century, Black clubwomen, a sisterhood of community leaders dedicated to strengthening the impoverished Black community, collaborated to found orphanages, day nurseries, and kindergartens to support young Black children who were often segregated from such institutions (Cahan, 1989; Knupfer, 1995; Lerner, 1974). In the 1970s, Black Panther Party women, Pantherettes, established systems of communal childcare to overcome racist and classist oppression in the Black community through inequitable public schooling and early education.

Black women family childcare providers have become an indispensable intergenerational element in the support of children and families. As members of the cultural community in which they serve, Black childcare providers and educators often embody a strong sense of collectivism and critical race consciousness not only about education but other overarching social structures as well (Acosta, 2019; Tuominen, 2003). The term “othermothering” has been used by Black scholars to

express the sense of care, responsibility, and kinship that manifests within the Black community through aunts, grandmothers, family friends, and educators who share in the social and cultural responsibility of raising children who are not of their own blood (Acosta, 2019; Foster, 1993; Loder, 2005).

Black women early educators' community activism is influenced by the intersectionality of gendered and racial experiences of Black womanhood, including mothering and othermothering. Tuominen (2003) found that Black women childcare providers' commitment to serving families in need is rooted within the cultural meaning and construction of social networks as a means of sustaining the community. She goes on to explain that "kinwork"—the collective work expected from family-centered networks across and within households—is what families need to endure over time. Kinwork "regenerates families, maintains lifetime continuities, sustains intergenerational responsibilities, and reinforces shared values" (Stack & Burton, 1993, p. 160).

Black early educators and care providers' kinwork or "community mothering" is a sort of activism that maintains Black culture, cultivates resilience against oppression and social disenfranchisement, and empowers the next generation (Collins, 2002; Dougherty, 2004; Naples, 2014; Tuominen, 2003). In 2020, like generations of Black women before them, a core of early childhood educators and caregivers stood as community mothers caring for, educating, and nurturing the children and families of their community through the COVID-19 pandemic. They adapted to essential parents' irregular work schedules, modified program routines, and supported virtual learners while still nurturing infants and toddlers. The women performed this care work all while protecting themselves, the children, and their households from exposure to the virus. In response to the tumultuous sociopolitical, health, and economic conditions of the spring and summer of 2020, the FCPs focused on their responsibility to protect themselves and their families, while using their networks and social capital to sustain and uplift their communities.

Theoretical Framework

Black feminist thought (BFT) contributes a strong critical theoretical framework for this study. As the offspring of feminist and critical race theories, BFT validates the experiences and perspectives of Black women while analyzing the meanings, social rules, values, and motives that govern action in a specific context—in this case, the COVID-19 pandemic (Collins, 2016; Few et al., 2003). The four tenets of BFT provided the ideal framework for this study because they acknowledge the complexity of the behavioral and psychological characteristics of Black women within their familial, communal, societal, generational, and sociobiological environments (Collins, 2016).

Self-Definition and Self-Valuation

The first tenet of BFT asserts that Black women empower themselves through self-definition and self-valuation, which enables them to establish multiple positive images and repel negative, controlling representations of Black womanhood. Self-definition involves challenging the political knowledge and validation processes that have resulted in externally defined, stereotypical images of Black womanhood (Collins, 2002; Davis, 2018). BFT demands that Black women not only self-define but also engage in self-valuation. Self-valuation reframes this dialogue from merely focusing on the technical accuracy of an image to stressing the power dynamics underlying the process of the definition itself (Davis, 2018).

Interlocking Identities

Second, the notion of interlocking identities recognizes that Black women are simultaneously marked by racial, gender, sexual, color, historical, socioeconomic status, and other stigmas (Davis, 2018; Richie, 2012). Moreover, a Black woman's socialization takes place at multiple familial, communal, and societal locations (Few et al., 2003).

Intertwined Intellectual Thought

Third, BFT states that Black women confront and dismantle overarching and interlocking structures of domination by intertwining everyday knowledge, intellectual thought and political activism. In contrast to the dominant perspective, BFT gives preference to Black women's way of creating synthesized meaning-making from an ever-shifting collective consciousness and the interpretation of collective wisdom, drawn from shared experiences (Collins, 1989; Richie, 2012).

Standpoint Epistemology

The last tenet of BFT is standpoint epistemology, which argues Black women possess a distinct cultural heritage that gives them the energy and skills to resist and transform daily discriminations (Collins, 1989; Taylor, 1998). Because of this unique heritage, Black women not only understand their own standpoint but are in the best position to evaluate and make claims about the meaning of it (Richie, 2012). BFT privileges the expertise of those who have experienced a circumstance, rather than those who generate knowledge from an outsiders' perspective and thus lack an authentic understanding of behaviors, values, or historical antecedents (Davis, 2018; Richie, 2012).

The purpose of this study was to cultivate a more holistic analysis of the realities of Black women educators and care providers by elevating their voices as critical counter-perspectives to those created and maintained by dominant society. As such, Black feminist thought allows me to explore the historical, social, and political contexts in which Black women have developed their cultural knowledge. Moreover, this critical lens centers the inequities perpetuated in education and other social structures by interrogating the role of race, racism, gender, and white supremacy.

Methodology

This narrative case study's homogenous sample was comprised of six state-licensed Black women family childcare providers, (LaToya [38], Sunni [31], Anya [35], Ms. Sherice [57], Ms. Felicia [48], and Ms. Tara [53]), who primarily served Black children between the ages of birth and four years of age. The FCPs were selected from a list of family childcare programs within a mid-sized, midwestern urban metropolis from four zip codes most heavily populated by the Black community (over 70%). I searched these zip codes in the local quality rating website and narrowed the results to those who identified as family providers. From this search, I contacted one hundred family childcare programs to calculate how many programs remained open during the "Safer at Home" order issued by the state governor. Thirty-three FCPs answered this call to indicate they were open for business and thus became the sample population for the study.

Context

The study's setting has rich historical and sociopolitical characteristics and is documented as one of the most racially segregated cities in the United States (Smeeding & Thornton, 2018). Furthermore, the state has been nationally recognized for having the most educational and economic disparities between Black and white children (Frey, 2018; Smeeding & Thornton, 2018). Forty-three percent of the city's Black children live in impoverished, racially segregated neighborhoods, which reflects in the racial segregation of the public schools and early childhood programs (Bonds et al., 2009; Frankenberg, 2016).

The various race-based, socioeconomic disparities within the city were amplified within the context of the pandemic as the city's Black community suffered some of the highest contraction and mortality rates of the virus per capita (Graham & Brooks, 2020; Hess, 2020; Ray, 2020). The media was inundated with conversations about the "unprecedented" impact of the pandemic—highlighting disparities in health care, education opportunities, and internet access between the rich and impoverished Communities of Color (Lockwood & Winter, 2020; Scheiber & Nelson, 2020). However, as members of the urban Black community, the FCPs were familiar with

conditions of hardship and the legacy of race-based inequity, institutional injustice, and the exploitation of Black families within the US political economy (Anderson, 1988; Collins, 2002; Taylor, 1998).

Data Collection and Analysis

The narratives of the family childcare providers (FCPs) were collected virtually or by phone through a series of IRB-approved, semi-structured interviews and a focus group. All data were deidentified, and pseudonyms were used to protect the identity of the participants. All digital data were kept in a password-protected computer, and printed transcripts were kept in a locked file cabinet. The transcripts underwent a two-phase deductive to inductive analysis (Saldaña, 2018). During the first phase, I conducted a line-by-line reading of the transcripts to identify and categorize significant ideas based on similarities and patterns found in the narratives (Maxwell & Miller, 2008). The themes that emerged described the women's understanding of themselves, their work, their communities, and the world. The codes generated from the first interviews helped me formulate the questions to guide the focus group and subsequent interviews. During the second phase, the transcripts were analyzed deductively using these identified codes.

To check my assumptions, add to the trustworthiness of my findings, and avoid the misinterpretation of the women's narratives, I adapted the questions outlined in Milner (2007) to keep at the forefront throughout the interpretation, coding, and analysis of the transcript data (Table 16.1).

Holding these questions at the forefront of my analysis proved helpful in (re)-aligning my work with what emerged as a significant theme in the narratives. While I was interested in how the FCPs leveraged their cultural knowledge to navigate the conditions of the pandemic, five of the six women spend significant time explaining tensions in their relationships with the local Department of Children and Families

Table 16.1 Data analysis integrity questions

What are the FCPs' cultural and racial heritage and what are the historical implications? How do I know?

How do the FCPs' racial and cultural backgrounds influence the way that they experience the world? Am I projecting my own thought onto their experience or is my work an accurate representation of the FCPs' experiences? How do I know?

What do the FCPs believe about race and culture in society and education, and how do they and I attend to the tensions inherent in my and their convictions and beliefs about race and culture in the research process? Why? How do I know?

What are the historical and current social, political, and contextual realities that have shaped the FCPs' racial and cultural ways of knowing? How consistent or inconsistent are these realities with my own? How do I know?

How do I negotiate and balance my own research interests with those of the FCPs, which may be inconsistent with or diverge from mine? How do I know?

(DCF) and other governing agencies. Their stories illustrated the complexities of being a Black woman business owner, both within the study's racialized socio-historical context and the gendered institution of childcare. As a result, the intersection of the FCPs' gendered and racialized experiences echo throughout the findings of this work.

Findings

The stories the women told illustrated the everyday lives of Black women family childcare providers. They determinedly continued their work even as long-standing social infrastructures were shaken around them in the aftermath of a worldwide health crisis. Echoing themes of activism through community mothering, the first finding of this work demonstrates how the Black women FCPs engaged a take-charge attitude through which they acted as autonomous agents to protect their households, their businesses, and the children of their programs. Second, they engaged their networks and various social connections to educate and empower community members. Lastly, the FCPs stretched beyond the reach of their childcare businesses to advocate for and ensure the advancement of the children, women, and families of their communities.

Take-Charge Attitude

Having a sense of agency and autonomy was a recurring theme in the FCPs' discussion of their professional lives as they described their interactions with the children, parents, and regulatory agencies. As independent businesswomen, the FCPs maintained a sense of pride and ownership that was ingrained into their personal and professional identities. This take-charge attitude was evident throughout the pandemic as the women understood it as their responsibility to sustain and protect themselves, their families, their businesses, and the children enrolled in their programs.

All the FCPs in this study were unmarried, and five of the six women had biological children or children they were responsible for raising in addition to their work in their programs. At the time of the study, Anya, Sunni, and LaToya's children were young enough to be fully dependent on their mothers for food, shelter, clothing, academic support, and other tangible needs. Because of their responsibilities as single mothers and heads of households, the FCPs' childcare businesses were a vital source of income through which they sustained their families both before and throughout the pandemic. This was affirmed when LaToya, a mother of three, shared that when she first heard of how schools and businesses were closing due to the pandemic, her first concern was not the health risk. Instead, she first thought of how she and her family would be financially affected. She said, "this is my only source of

income. Sometimes it's hard to put up—especially when you just kind of by yourself. I'm a single mom.” Similarly, Ms.

Sherice, a 57-year-old FCP, said, “You still got to pay the bills. [. . .] you got to live. It's just me. I ain't got no husband or nobody I can call and say, ‘Can I get a few dollars?’”

Even with the responsibility of paying overhead expenses, taxes, and maintaining their households, the women exercised their agency through setting their program policies and prices to serve their communities. For example, Ms. Sherice did not pay herself through her childcare work. Instead, she set low prices and did not charge copays to ensure she provided the parents with affordable services. Similarly, Ms. Tara did not pay herself from her childcare business. She said, “it's pretty much a ministry for me. It's not about the money, because I'm blessed.”

When the pandemic came, the lack of verifiable income hindered some of the FCPs from qualifying for the government's unemployment insurance, which was provided specifically for individuals who lost wages during the pandemic. Yet, as savvy businesswomen, the women took charge to navigate the system and ensure the survival of their businesses and continue serving children and families. With her take-charge attitude, Ms. Tara shifted her operations at the onset of the pandemic so she could still serve essential parents while not worrying about how the lower attendance would affect her ability to pay her employee. Ms. Tara temporarily laid off her employee and cared for the children by herself so the employee could utilize the government's unemployment insurance. Ms. Tara reflected,

It's just hard. For a couple months, I worked by myself because attendance was low, because a lot of my parents are laid-off. So, my employee was able to get that extra \$600 [of unemployment insurance]. I thought it would be best for her to do that instead of me struggling, trying to pay [her] when I don't have it.

In essence, Ms. Tara took charge to continue caring for the children and families of her program while making sure her employee was protected from the financial uncertainty of the pandemic.

The FCPs' narratives also illustrated how they took charge and navigated the many policy changes that occurred in the childcare landscape. Anya recognized the increased need for quality childcare as many family and group programs closed permanently under the financial impact of the pandemic. When the pandemic began in March 2020, the local Department of Children and Families (DCF) allowed licensed FCPs to exceed their normal ratios to serve the children of essential workers and those who could not attend school. However, in September of 2020, when many children returned to school on virtual platforms, DCF did not allow the same considerations. Anya described her dilemma of no longer being allowed the capacity to accommodate the many families with virtual learners who still needed childcare services. Anya said, “[DCF] gave us [FCPs] that flexibility and then they took it back.”

Instead of turning down the families who she could no longer serve because of the changes in DCF policies, Anya took charge and circumnavigated the system by buying a building to increase her capacity to serve more children and families. At the

time of this study, she was completing the financial paperwork to open a center-based childcare program designed to accommodate the needs of virtual learners and the families on her growing waitlist. Anya's story is not only a prime example of navigational capital, but by negotiating systems and policies that hindered her success, she displayed significant aspirational capital. Yosso (2005) describes aspirational capital as the ability of Communities of Color to maintain hopes and dreams, even in the face of barriers. Each of the FCPs encountered various challenges throughout the pandemic, including systemic barriers, threats to their income, and personal health. Yet, as community mothers, the women overcame these obstacles through their take-charge attitudes and tenacious aspiration to sustain their families, their businesses, and their communities.

Social Networking to Meet Community Needs

History illustrates how Black women have developed social capital (Yosso, 2005), or networks of people and community resources which aid in navigating social systems and conditions of everyday life. A major question of this study asked how the Black women family childcare providers networked and connected to support young learners and their families during the pandemic. I anticipated the FCPs would describe how they reached out to an extensive network of family providers and community educators to share ideas and support during this time of community hardship. However, I learned the FCPs made few, if any, connections with other family providers during the pandemic. For example, Anya said she did not connect with anyone, while Sunni said the only two providers she knew were on social media. LaToya, who had been in the field for over 20 years said, "I don't even know one person in family [childcare]." The only providers she had connections with operated in center-based programs. Ms. Sherice, a woman with over 38 years in early childcare, shook her head at the siloed nature of some family childcare providers. She explained that she too had few connections although there were numerous FCPs in her neighborhood to whom she reached out on different occasions.

Although the FCPs had few connections with other family childcare providers, they employed connections they developed in other social arenas to aid in serving the children of their programs during the pandemic. Ms. Felicia and Ms. Tara shared accounts of how they employed their social capital to support the children and families. For example, even though she closed her program at the beginning of the pandemic to assess the situation and complete a deep sanitation, Ms. Felicia still fed hot meals to her program's families and her neighbors. She networked with the head of the food pantry at her church and another local non-profit organization to gather cases of donations (i.e., bacon, eggs, milk, diapers, and wipes), which she then prepared and distributed from her front door.

Even though her childcare program was closed, Ms. Felicia maintained her role as a community mother. She would wake up early to make hot breakfasts of "cheesy grits and eggs and sausages or bacon" for the community members. She also

distributed cereal boxes, milk, and formula so the parents could feed their children. Ms. Felicia explained, the parents would come to her door with masks and gloves, and she would ask, “How many kids are in the house?” Then, she distributed grocery bags of food and provisions accordingly. In addition to networking to provide food and provisions, Ms. Felicia bought a sewing machine and made masks for herself, her extended family, and the families of her program. Throughout her self-quarantine in the first two weeks of the pandemic, Ms. Felicia engaged her social capital and take-charge attitude to sustain the families of her community with food, provisions, and personal protection.

Ms. Tara also explained how she employed connections from her previous work in the school district to provide the children of her program the educational support they needed during the pandemic. She explained,

I have a child I'm thinking possibly may be autistic. She started like two days ago and—little issue there. I have some friends that [teach] special ed at [the local school district], so I'm trying to hook up with them to come and assess her for me.

In addition to working with her associates in the school district to professionally evaluate the child in her program, Ms. Tara connected with her aunt, who is a retired teacher. Her aunt helped Ms. Tara observe and identify the needs of children in the program and suggested the necessary “formal assessment.” These accounts illustrate how the FCPs continued their work as community mothers and used their social capital to address the physical and academic needs of the children and families throughout the pandemic.

Identities and Influence Beyond Child Care

It was clear the Black women family childcare providers were a key source of social capital for the families in their program by opening their businesses during the health crisis and enabling essential parents to continue to work. However, the resources the FCPs provided the community during this time of community hardship went further than caring for their children. The women fulfilled various roles including care providers, educators, mothers, othermothers, activists, and spiritual leaders. Each of these identities was rooted deeply within their aspirations to help others and advance their people. For example, in addition to her work in the church, Ms. Felicia explained she has always had a passion for helping mothers of young children. At one point, she wanted to establish a group home for young mothers and their children; but instead, she serves them by mentoring and counseling the young mothers of her childcare business.

Similarly, Anya initially planned to establish a group home for troubled girls. As a survivor of “mental and physical abuse,” Anya explained that “when I came out of that situation, it pushed me to know exactly what I did *not* want; and it encouraged me to speak up to help others who are in that situation—who don't have an outlet.” Anya yearned to help women who “never learned self-love, or [those who] don't see

the good in themselves, which makes them stay in those mentally and physically abusive relationships.” This passion led her to become an activist and organize women’s empowerment events to build “that support system” for women with similar stories. Anya explained that she not only wanted to help women who already experienced abuse and other gendered oppressions, but she desired to help the next generation make choices to protect themselves from being victimized in the first place. She said, “it’s very, very important now for the young girls and young ladies to know their selves, to love their selves, and not be seeking it somewhere else.”

While some of the FCPs’ influence in their community took place outside of the walls of their programs, other participants used the programs themselves to impact the community. For example, Sunni was passionate about cultivating the gift of language within the children of her program. In our conversation, she discussed how as a New York-born Dominican, she was well aware of the segregation of the Black and Latin communities in our city. In response, she determined she would “bring something different to the northside for early childhood.” With that intention, she built the curriculum and daily routines for the children in her program around sharing her culture and linguistic capital (Yosso, 2005) through teaching Spanish. Sunni used her identity and capital as a bilingual Black Latina to offer children the gift of language. Rooted in her distinct cultural heritage, Sunni resisted the local school system’s segregation and perpetuation of ignorance around cultural-linguistic diversity in the Black community. Instead, she worked against these ideologies by educating the children in her program to become bilingual and culturally pluralistic.

LaToya used her program as a testament to the excellence that could come from her specific zip code. She explained that when the state quality rating and improvement system was first implemented, there were low expectations for the centers in her community. Most of the family and center-based programs in her zip code were rated as two- or three-star programs. However, LaToya was determined, “I wanted to raise the expectations for childcare in my area and for home childcare because they feel like we’re babysitting.” Not only did she empower herself through formal education, but LaToya committed to sharing her knowledge and experiential wisdom with other young providers who she believed needed the guidance of a young, relatable Black woman. At the time of this study, LaToya had raised her program level to four stars and was awaiting the validation of her five-star status. The Black women FCPs transmitted an ideological, social, and cultural inheritance to the young educators, families, and children they mentored—seeing their care work as a means of uplifting and transforming their communities. This cultural notion of uplifting through education reaches deep into the Afrocentric understanding of collectivism and one’s sense of responsibility for the liberation and advancement of the Black community (Anderson, 1988; Collins, 1989, 2002).

While LaToya encouraged young FCPs to educate themselves so they could advocate for themselves and their businesses, Ms. Sherice struggled with the idea of returning to school to raise her rating level. As an active leader in her church community, she was proud of the Christian upbringing she gave the children and the “old school” parenting skills she modeled for the families in her care. Parents enrolled their children in her program specifically for her faith-based curriculum.

During the focus group, Ms. Sherice explained that although she had 38 years of experience and every other aspect of her business was highly assessed, she was still rated as a three-star program because she does not “have the patience to go to schooling.” Ms. Sherice added that generations of children had graduated from her care, who she knew was ready for the “real world” because of the feedback parents gave her. Despite her limited formal education, the parents assured Ms. Sherice the children from her program were not only ready for academic success, but they were socio-emotionally competent, spiritually sound, and rooted in a sense of community. With this, Ms. Sherice self-defined as a quality program despite her formal rating.

The women’s narratives illustrated how their influence and contribution in the community extended beyond providing childcare. In addition to care providers, the women identified as mentors, spiritual counselors, organizational leaders, activists, and othermothers. As a demonstration of their social brilliance and cultural knowledge, the FCPs leveraged the nuances of their biographies and social roles to advance the children, women, and families of their communities. This work is a continuation of Black women’s legacy of going beyond childcare to engage in community activism and address the diverse needs of Black children and families (Tuominen, 2003).

Discussion and Implications

This study describes how Black women FCPs acted as community mothers—leveraging their various capitals and social roles to help sustain their community. Learning the women’s individual perspectives and experiences offers a critical counter-perspective of the dominant narrative during a worldwide health crisis where childcare providers and early educators were not recognized as essential professionals. Although this inquiry was situated in the context of the COVID-19 pandemic, the pandemic, the social-economic upheaval, and community unrest during the summer of 2020 seemed peripheral within the women’s description of their experiences. Although the social backdrop changed, the women’s fundamental work of community mothering within their family programs changed little. In essence, the pillars of their cultural knowledge (i.e., self-determination, education, faith, and community advancement) remained constant regardless of the health risk and financial insecurities brought by the conditions of the pandemic.

The findings of this work hold implications for state governing agencies and for the profession of early childhood education (ECE) as a whole. First, policymakers and legislators must reconceptualize the quality assessment of family childcare providers by quality rating and improvement systems and other regulatory agencies. The data support the creation of a more culturally responsive, community-based rating system that champions the voices and values of parents, families, and other community-sanctioned vehicles for the definition of quality in early childhood education. This also requires a critical review of the way Black women’s cultural ways of being and knowing are represented in education reform and policy. Second,

state governing agencies and policymakers must examine the structures in place to support and protect the care professionals who serve our youngest citizens—such as quality, accessible healthcare options for self-employed childcare professionals.

Reconceptualizing Quality Assessment

Black women FCPs' agency in developing meaningful pedagogical practices were key to their ability to meet the individual child's personal, sociocultural, linguistic, and developmental capabilities as well as the families' cultural values. As they cared for children according to the values of the parents and their own program policies, the FCPs opposed the taken-for-granted assumptions prevalent in early childhood education (ECE) about teaching, learning, and curriculum. For example, Ms. Sherice self-identified as a quality provider thus challenging the state agencies' (in)-validation process due to her level of formal education. Through her self-definition, Ms. Sherice resisted the external rater's delegitimization of her professional knowledge, cultural ways of being, and experiential wisdom.

In her seminal work documenting the racialized experiences of Black women family childcare providers within this study's local context, Turner (2018) discusses how the state quality rating and improvement system, in collaboration with the childcare Registry, targeted urban, Black childcare providers. Forty-nine states and the District of Columbia have implemented quality rating and improvement systems, and almost 85% of those systems offer some form of financial incentives to improve quality (Workman & Jessen-Howard, 2018). However, Turner (2018) highlights that our local quality rating and improvement system is the only one that penalizes programs deemed lower quality by decreasing the funds they receive for serving low-income, government-subsidized families. Turner (2018) asserts that "Under the guise of welfare reform and improving the quality of child care for low-income children, the state [...] created a punitive system in which low-income children were unfairly targeted" (p. 24).

As the state Registry documents all regulated childcare providers' formal training and education, the state DCF is aware of each providers' physical location and education attainment.

Therefore, by making formal education the most consequential area of program rating, the state DCF could predict that urban providers serving low-income Families of Color would be disproportionately affected by the implementation of the quality rating and improvement system. With low benefits and an average annual income of \$18,000 (Dresser et al., 2016; Fothergill, 2013), many family providers cannot afford to pursue degrees to increase their quality rating.

Further reducing the funds they receive from serving low-income, government-subsidized families only perpetuates a cycle of low-quality rating and fewer resources to improve this rating. With externally defined standards for quality care and education that champion knowledge gained through Western institutions of higher education, Black women FCPs balance their cultural ways of childrearing

and guidance with what is deemed relevant by policies, governing agencies, and professional associations (Johnson-Staub, 2017; Lent, 2016). The assimilationist and deficit perspectives, that privilege white-centric values, norms, and standards of quality while devaluing the cultural contributions of educators from diverse racial, ethnic, and linguistic backgrounds, have constructed the inequitable, culturally unresponsive policies and practices that govern modern childcare (Brown, 2009; Brown & Barry, 2019; Goepel, 2012; Urban, 2008).

My work challenges the way privilege and power in education have valorized the rationalistic Western lens and disempowered Black providers and others who serve Communities of Color. The representation of diverse voices of Black women family childcare providers is a crucial step in their recognition as indispensable members of the early childhood community. As such, their voices must be heard throughout policy and decision-making around issues of pedagogy, practice, equity, and social justice within the field of ECE. It is time for a critical shift in the conversations towards the recognition of marginalized perspectives and the disregarded intellectual contribution of Black women early educators.

I advocate for a re-assessment of what constitutes meaningful knowledge and essential education. In this reconceptualization, quality rating and improvement systems and other evaluation measurements should account for the relevance of educators' backgrounds and their cultural congruence with children, families, and their communities. Additionally, to reassess the valued forms of professional knowledge, program and teacher evaluation systems and education programs should account for and preference the experiential knowledge and cultural wisdom valued by the families and communities served, rather than the heavy emphasis on formal education. Within teacher education programs, this reconceptualization would allow early educators to earn credits for demonstrating competencies based on their previous child care experience. In quality rating and improvement systems, this would take the form of a community evaluation process that considers the families' and other community-based stakeholders' assessment of the educator based on their own value system.

This reconceptualist approach of community evaluation has been preferred by Scholars of Color dedicated to a more culturally responsive assessment of "good teachers" (Foster, 1993; Irvine, 1990; Lipman, 1998). Reconceptualists believe that curriculum and what defines a good educator should be of children, their families, communities, and their culturally-developed ways of knowing (Mueller & Whyte, 2019). A true commitment to the community and families' voices would allow the families agency to determine what curriculum, values, and practices are important to them and how the program meets these standards.

Structures to Support and Protect Childcare Providers

Although this chapter honors family childcare providers as community mothers who selflessly served their communities before and throughout the pandemic, we must

acknowledge that the FCPs risked their health and well-being daily to care for the children of essential workers. Although the women chose to take charge and continue serving throughout the pandemic, they were not above the fears of contracting the virus or exposing their family members. Anya described the mental pressure of knowing the risk of exposing her elderly parents to the virus because of her decision to continue serving children and families.

I have lost loved ones from this [virus]; and it's really scary. [...] All you can do is really try to stay as sanitized as possible and pray about it. It's scary because having a daycare and after I get finished, I go see my elderly parents. I can go fight [the virus] off; but they might not be able to fight it off like I can. So, it is really scary.

Similarly, Ms. Tara was highly aware of the risk in her decision to open the doors of her program. At 53 years of age with a pre-existing medical condition, she was considered at high risk to contract and die from COVID-19. Furthermore, her daughter, who also helped in the program, suffered from severe asthma. With this, Ms. Tara stated, "We are very high risk. We cannot afford to get sick. I may be one of those that don't make it out the hospital." Although Ms. Tara expressed her apprehension of serving in family childcare where "you're in small quarters," she felt she had little choice since parents could easily take their children to a different program and not return. Considering her delicate financial state and the risk of losing her business, Ms. Tara continued her work in serving the children of essential workers.

The worldwide health crisis highlighted many gaps in the American health-care system. Many family childcare providers were among the 27.5 million Americans who had no health insurance before the COVID-19 pandemic (Frazee, 2020). The FCPs of this study and other uninsured childcare providers were amongst the most vulnerable populations for two reasons. First, FCPs risk exposure to the virus by caring for children of essential workers who work in frontline jobs, which increase their probability of being exposed to the virus. Second, because they are poorly compensated for their work, FCPs are less likely to have quality health insurance that will support them in the case that they contract the virus.

This study affirms the need for a more effective support system to protect self-employed family childcare providers. During the pandemic, childcare providers could apply to receive hazard pay equivalent to \$5 per hour for the time worked during specific weeks. However, as demonstrated in the focus group conversation, not all providers were aware of this provision. Moreover, although it was offered twice throughout the pandemic, the lump sum (based on the number of children and employees in the program) does not address the consistent lack of accessible health care and health insurance many FCPs face.

During the worldwide health crisis, the women care providers who were called upon to keep the nation's parents at work were among those who were least protected. Many of them had no more than their faith and bleach wipes to safeguard them in the case they were exposed to the virus. As Anya stated, "I hate not having insurance right now. I just pray that my health stays in a good shape for right now." The women caring for the nation's youngest citizens deserve more protection against

the significant financial and health risk of contracting the virus. The structures needed to support FCPs include quality health insurance that will cover the cost of COVID-19 treatment (not just testing), as well as sustainable, accessible, and high-quality health-care options.

Strengths and Limitations

One of the major strengths of this work is my positionality as a Black woman childcare program administrator within a local, Black-owned childcare program. My position as an insider researcher gave me “the ability to ask more meaningful questions and read non-verbal cues, and most importantly, be able to project a more truthful, authentic understanding” of the FCPs’ unique experiences and perspectives (Merriam et al., 2001, p. 411). The use of rich, meaningful questions to elicit stories and deeper narratives helped me capture more complete, contextualized experiences while maintaining my commitment to the cultural integrity of the women and their communities (Lincoln & Guba, 1985; Tillman, 2002).

Gathering rich stories and deeper narratives, however, led to certain limitations of this work. The more voluble FCPs spoke in-depth about certain experiences and perspectives they had, which cannot all be represented in one chapter. Therefore, I had to make intentional decisions on what was included in my writing. This was an especially sensitive task considering my commitment to a holistic representation of the nuance of each woman’s experiences (Stake, 2005). I navigated this decision-making by focusing on the data most relevant to answering my research questions about the women’s cultural knowledge and use of capital.

Lastly, only two of the FCPs opted to participate in both interviews and the community talk, while two opted only to participate in the first interview. While I adapted the first interview protocol to include all the questions of interest, the fact that two of the FCPs were unable to answer any clarifying questions means there are details to their narratives, relevant to this study, that may not be included in the transcripts.

While this study adds to the body of knowledge around Black women family childcare providers, there remains much to learn regarding the impact of the pandemic on the urban childcare industry. My research suggests that about two-thirds of the local FCPs closed either temporarily or permanently during the pandemic. While we can speculate that they closed due to low enrollment, financial struggles, and the health risk of contracting the virus, these are only assumptions without further research to answer these questions. Further, during the pandemic, the state and local governments focused their efforts to support programs that served low-income families who depended on government-subsidized childcare. However, it is equally important to consider those providers who choose to serve predominantly “private pay” families or those who pay out-of-pocket for childcare services. Learning how these providers were impacted by the pandemic and what support they received—keeping in view the increased unemployment rates within the

community—will contribute to a better understanding of the impact of the pandemic and how providers can be supported in the future.

Finally, this study focused on how the pandemic affected Black women family childcare providers within their community work. Yet, one cannot disregard the fact that the communities they serve consist of individual families. Therefore, in understanding the full effects of the pandemic on community childcare, it is imperative to hear the voices of the families in the community as well.

Conclusion

This multiple case study emphasizes the voices of Black women family childcare providers as they adapted their roles as community mothers during the COVID-19 pandemic. The perspectives of the participants illuminate meaningful aspects of the women's unique epistemologies and cultural knowledge. Like generations of Black women care providers and community mothers before them, the women represented in this study rooted themselves in their self-determination to resist, navigate, and transform community hardship and uplift the Black community. Despite the significant challenges presented within the conditions of the pandemic, the family childcare providers went beyond their role as caregivers and educators to advocate for the children and families of their communities. Their stories underscore the importance of further investigation into Black women educators' epistemologies and cultural ways of being. In amplifying Black women's voices and diverse forms of knowledge, we can contribute to a larger pool of practices and more readily address the diverse and dynamic needs of young learners.

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Chapter 17

The COVID-19 Pandemic and Early Childhood Education in Ethiopia, Liberia, and Pakistan: Perspectives of Pre-primary School Teachers



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Teachers play a critical role in a child's educational experience. The most consistent factors that influence student learning are teacher knowledge, teaching practice, and instructional time (Bashir et al., 2018). Teachers who have education and training on pedagogy, experience, and knowledge in the subjects have a positive association with student achievement and school effectiveness in sub-Saharan Africa (Lee et al.,

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2005). Teachers influence children's learning and development, especially in early childhood education (ECE), where children are forming their attitudes toward learning and schooling. During the unprecedented global health crisis that affected more than 167 million students in nearly every country, it is important to understand the extent to which ECE teachers were able to engage in children's learning during the COVID-19 school closures.

This chapter explores whether and how ECE teachers were engaged with children and families during the pandemic across three countries, Ethiopia, Liberia, and Pakistan. In particular, we focused on the following topics: (1) Support ECE teachers received during school closures, (2) How teachers supported children's learning at home through communication with parents and families, (3) Teachers' perspectives on equity and inclusion during the pandemic, and (4) How teachers prepared for school reopening. Gaining insights into teachers' experiences during the pandemic is necessary to guide policy and programming to support them in future crises.

The research was conducted as part of the Early Learning Partnership (ELP) systems research initiative, launched in 2017 to fill a gap in evidence on how to deliver ECE "equitably, cost-effectively, with quality, and at scale" (World Bank, 2016). The initiative intends to build an international evidence base and provide tools for policymakers in low-income countries. Three of the countries participating in the initiative conducted research on the experiences of teachers, caregivers, and government officials between mid-2020 and early 2021.

Background

This section describes the context of the study, including a summary of the available literature on how teachers around the world have responded to the COVID-19 pandemic. It gives a description of the context in which the surveys were conducted in Ethiopia, Liberia, and Pakistan, including how and when schools were closed and how the education system responded to school closures. It ends with three illustrative stories of teachers in each country, and the challenges they faced during the COVID-19 school closures.

Teacher's Response to the COVID-19 Pandemic

When school-based ECE services closed for approximately 167 million children at the start of the pandemic, an estimated 19.01 billion instructional days were lost, with the largest losses occurring in middle-income countries (McCoy et al., 2021). Millions of young children were, without warning, sent to learn from home, and parents were pushed to manage childcare responsibilities, their own deteriorating mental and physical health, and increased economic constraints simultaneously. The role of teachers in supporting children and families has become increasingly critical

during this time. Teachers' roles have changed significantly during the pandemic; they no longer have a classroom to teach in but still have students to teach and now have the added job of supporting parents and families.

According to a study from Brazil, 83% of teachers considered themselves unprepared to teach remotely, 67% were anxious to do so, 38% felt tired, and less than 10% felt happy or satisfied (Barron et al., 2021). The transition to remote learning has made support to teachers increasingly important, and according to a Ministries of Education survey conducted by UNESCO, UNICEF, and the World Bank in 2017, 90% of Ministries provided their teachers with guidelines on giving student feedback, consistently communicating with caregivers, and tracking learning through reports to local education units (Barron et al., 2021). As schools in many parts of the world are preparing to reopen, teachers will play a central role in making up for the lost time in the classroom and supporting children who might have fallen behind.

Context in Ethiopia, Liberia, and Pakistan: Education Systems' Response to COVID-19

While the initial school closures happened within the same 3 days (March 14–16, 2020) across the three countries, other aspects of the school closures and efforts to sustain learning opportunities varied greatly. The following sections describe how the education systems responded to the COVID-19 crisis in Ethiopia, Liberia, and Pakistan.

Ethiopia

Following the confirmation of the first case of COVID-19 in Ethiopia on March 13, 2020, the government responded swiftly and announced the suspension of schools from March 16, 2020. More than 26 million students, including 3.2 million young children who have participated in pre-primary education, were affected by the school closure. When a six-month state of emergency due to COVID-19 ended in September 2020, the government announced the school reopening plan, which started from October 2020 with a phased approach, prioritizing schools in rural areas. However, many parents and teachers are worried about the risks involved with the reopening. According to a survey conducted by the Ministry of Education, 90% of families wanted the schools to reopen but needed assurance on COVID-19 preventive measures.

When the schools were closed nationwide, the Ministry of Education announced the Education Sector COVID-19 Preparedness and Response Plan on April 3, 2020. This plan included the provision of distance learning through available media lessons via radio and TV, focusing on primary and secondary education. Despite this immediate response by the Ethiopian government, pre-primary education was

excluded from the strategy. As a result, many pre-primary students were likely to have little or no education during the closure period.

Liberia

The Ministry of Education in Liberia responded rapidly to COVID-19; the first case of COVID-19 was registered on Friday, March 13, 2020, and schools were closed from the following Monday. In June 2020, the Ministry of Education directed staggered reopening of classes from grades 6 to 12, prioritizing the return of students in grade 12 who would soon be sitting for examinations. Children in ECE to grade 5 were required to stay at home until the new academic year, and the teachers for these children were asked to provide homework activities. From December 1, 2020, schools were asked to reopen for all levels of learning for the new academic year. However, many schools would remain closed until January and February 2021, in part due to delays in the distribution of hygiene materials.

The primary response to school closures was the provision of a Teaching by Radio program, with different programs for children of all ages. Both state and non-state stakeholders recognized that the effectiveness of the Teaching by Radio program for children in ECE was likely to be limited and that access to the program was likely to be inequitable. Nonetheless, the Ministry of Education and the multi-stakeholder Education in Emergencies Working Group believed that Teaching by Radio was the only viable intervention to maintain some measure of learning during school closures.

The school closures posed particular difficulties for private schools, many of which, without tuition payments, were unable to pay their teachers. In October 2020, the Ministry of Education announced a plan to make an honorarium-type payment to private school teachers to offset this loss of income. This program launched officially in December 2020.

Pakistan

Owing to its proximity to China, Pakistan was among the first countries to take strict prevention measures at the onset of the COVID-19 pandemic, including widespread school closures. Schools in Sindh province closed on February 14, 2020, followed by nationwide school closures by March 14, 2020. After 6 months, schools began to reopen gradually. However, further school closures were instituted in November 2020 and then May and June 2021 as subsequent waves of the pandemic hit the country. The COVID-19 pandemic has had serious short- and long-term ramifications on education outcomes across the country. According to the Ministry of Federal Education and Professional Training, an estimated 40 million children across all grade levels were impacted by the pandemic. Geven and Hasan (2020), in their estimate of learning losses in Pakistan due to the pandemic-related school closures, highlight that “the ‘learning poverty’ (the share of children who do not learn to read and understand a simple text by age 10), is likely to go up to 79% from an already high estimate of 75%.”

Those most affected by school closures were younger ECE and lower-primary-aged children, who ended up having far lesser options of distance learning and homeschooling, as both teachers and parents were unprepared for the task of supporting children. The school closures for young children led to learning losses that are only now being quantified. The first resilience plan, developed by the federal government for the continuation of educational activities, did not identify the early years as an action area. However, as the lockdown situation unfolded across the province, provincial systems took a leading role in including ECE in the response strategy. Both the Programme Monitoring and Implementation Unit (PMIU) and Quaid-e-Azam Academy for Educational Development (QAED) trained teachers and collected data from the field to develop response strategies. QAED and PMIU organized virtual trainings for ECE staff members. However, it remains unclear if any substantial training on improving specific learning outcomes was provided.

The government has already attempted to deploy distance learning measures to ensure learning continuity. During the same time, teachers have continued engaging with children as much as they can, via WhatsApp and even face-to-face meetings. Nevertheless, the overall learning situation in the country hints at learning losses as well as increased dropout rates. The role of teachers is essential in not only bringing children back to school but also ensuring their learning and development. To that end, there are still gaps in governmental plans and policies.

Table 17.1 provides details on school closures and reopening, as well as how the government responded and the extent to which pre-primary was included in the response.

Table 17.1 School closures and reopening in study countries

Country	Closure date (National)	Reopening date (National)	Reopening approach	Government response plan	Pre-primary inclusion in response plan
Ethiopia	March 16, 2020	October 2020	Phased, prioritized rural areas	Education Sector COVID-19 Preparedness and Response Plan: Distance learning via radio and TV for primary and secondary students	Not included
Liberia	March 16, 2020	December 2020	Staggered, prioritized grade 12	Teaching by Radio program for all ages	Included, question of effectiveness and equity
Pakistan	March 14, 2020 November 2020 May/June 2021	September 2020 January 2021	Gradual, followed by subsequent closures due to outbreaks	National resilience plan + provincial systems (i.e., the PMIU, QAED, and the Punjab Education Support Program held ECE teacher trainings)	Not included in the national response. Provincial programs are supporting ECE teachers

Illustrative Stories of Early Childhood Education Teachers in Ethiopia, Liberia, and Pakistan

Teachers' experiences are often overlooked, especially in unpredictable circumstances. We start with illustrative stories of ECE teachers in Ethiopia, Liberia, and Pakistan based on their daily experiences during school closures. The names of the teachers are anonymized.

Genet is the school principal and the head of ECE classes in the Southern Nations, Nationalities, and Peoples Region (SNNPR) of Ethiopia. During the COVID-19 school closures, her school had a steering committee, including members of the Parent-Teacher Association. The steering committee was engaged in house-to-house support for ECE children and their parents, especially on how to prevent themselves from catching coronavirus. They raised awareness of parents on the pandemic and provided necessary supplies, including water and soap. However, there was no support for parents on how to engage in children's learning at home, which raised concerns about learning continuity for children in ECE classes, which might be severely interrupted by the school closure. Genet thinks that the educational support for pre-primary children during the school closures could be considered weak or non-existent.

Isaac is the principal of a public school in Liberia and also teaches one of the three pre-primary classes and some subjects for the upper primary classes. During the COVID-19 pandemic, the Ministry of Education reopened classes for children in grade 6 and above while asking children from early childhood education (ECE) to grade 5 to remain at home. However, Isaac continued to teach his pre-primary class—although now for only 1 h, held three times each week, and alternating with half the class in each lesson. Despite these efforts, Isaac is disappointed to see how much his students in pre-primary classes have forgotten during the lockdown, especially among the youngest.

Wajiha is an ECE teacher at a government primary school in Punjab, Pakistan. When the government ordered the closing of schools for an indefinite period, Wajiha attempted to engage her students in distance learning. However, most households did not have access to the Internet and the online resources that the government had developed for distance learning. Wajiha also noticed that children were suffering from a heavy emotional toll while being restricted at home and not following a daily routine. Wajiha and her fellow teachers devised an ad hoc system of distance learning wherein she would guide parents daily via text messages and calls on how to engage their children in play-based learning. The parents were given accessible lesson plans and guides to encourage their involvement with the education of young children. When the schools reopened, ECE children began attending school on alternate days. Wajiha focused on covering as much of the missed curriculum as possible on those days. Nevertheless, it has become increasingly clear to her that her young students have suffered learning losses due to staying away from school, and it will require sustained effort across multiple fronts to make up for those losses.

Methodology

This study was carried out using phone surveys (Ethiopia, Pakistan) and in-person surveys (Liberia). Data collection via mobile phone surveys offers an alternative approach to data collection for crisis monitoring when face-to-face data collection would not be feasible (Dabalen et al., 2016). With its high degree of flexibility during unforeseen crises, phone surveys enable researchers to undertake the survey without risking the safety of either the fieldworkers or the participants in the study.

Sampling and Participants

Table 17.2 presents the sample size, methods, and geographical coverage of the surveys conducted in the three countries.

Ethiopia

In Ethiopia, data were collected from 48 government primary schools with pre-primary classes (called “O-Class”) across six regions: Addis Ababa, Amhara, Benishangul-Gumuz, Oromia, SNNP, and Tigray. Eight schools were selected from each region. These schools were selected out of 88 schools from the Early Learning Partnership Phase 2 study in Ethiopia, which started in 2019 before the pandemic. For each school, both the headteacher and pre-primary teacher participated in the survey, with a total of 48 headteachers and 48 pre-primary teachers surveyed. Data collection was undertaken exclusively via mobile phone surveys between August and September 2020, since the schools were closed since March 2020.

Table 17.2 COVID-19 survey methods in Ethiopia, Liberia, and Pakistan

Description	Ethiopia	Liberia	Pakistan
Sample: School	48 government schools	54 government schools	156 government schools
Sample: Pre-primary school teachers	48 teachers	82 teachers	156 teachers
Sampling approach	Randomly selected from the ELP Phase 2 study sample schools	Randomly selected from two counties	Probability proportional to size sampling in select villages in Punjab
Geographical coverage	6 regions	2 counties	8 regions
Survey methods	Mobile phone survey	In-person surveys	Mobile phone survey
Survey period	August 2020	January–February, 2021	January–March, 2021

Liberia

In Liberia, 82 teachers were surveyed from 54 schools in Gbarpolu and Bomi counties in November 2019 and January 2021. These schools were selected as part of the Early Learning Partnership Phase 2 study, which commenced prior to COVID-19. The schools were selected randomly from the available EMIS data and included in the study if more than 20 children were enrolled in preschool and present during an initial survey visit. The fieldwork team selected preschool classes with the largest share of children between the ages of three and six, and up to two classes were selected at each school. Teachers were invited to participate in the study in November 2019 if they taught the selected classes. In January 2021, the fieldwork team interviewed the same teachers selected at baseline and attempted to reach those who were no longer teaching the same class, were no longer teaching in the same school, or had left the profession.

Pakistan

The research was conducted in 156 government ECE schools in 8 districts of Punjab, ensuring representation of the north, south, and central Regions of the province. These districts were randomly sampled from a sampling frame derived from the 2017 Population Census of Pakistan. Approximately 20 villages were randomly selected, using the probability proportional to size (PPS) method. Once the villages were sampled, the study team engaged with the District Education Authorities. The teams shared the village lists and obtained the contact number for the headteacher responsible for the government ECE classroom in that particular village. For each school, both the headteacher and the teacher were interviewed.

Instruments

The survey instruments were drafted through the iterative workshops between the Work Bank education team and three participating country teams in May 2020. A preliminary set of research questions were drawn from the teacher survey in the Measuring Early Learning Quality and Outcomes (MELQO) instrument (UNESCO et al., 2017). Based on the core modules selected from the MELQO tool, each country team developed survey items specifically adapted to the country contexts. The purpose of the surveys was to provide the country governments and the World Bank information to help with responding to COVID-19. While the hope was also to identify similarities and differences across the countries included in the study, cross-country analysis was not the main motivator for this research. The surveys were translated into local languages and piloted in each of the countries.

Data Analysis

For the data analysis, data collected via the phone survey in Ethiopia and Pakistan (Punjab) and the in-person survey in Liberia were merged with the respondents' background information collected during the previous round of the ELP survey, conducted before the COVID-19 pandemic. It helps us to analyze the data to show differences in teachers' responses and perspectives across various groups of respondents, such as teachers in urban schools versus rural schools. The descriptive analysis presented in the next section was undertaken using Stata 16.

Results

The findings from the three-country surveys are described in relation to the support offered to teachers, teachers' support to children and families, teachers' efforts to reach all children inclusively, and teachers' preparation for school reopenings.

Support Offered to ECE Teachers During the COVID-19 School Closures

During school closures and upon school reopening, teachers require support in terms of financial compensation and professional development. Nearly all teachers surveyed in Pakistan (97%) said that they received three-quarters to full salaries during school closures, whereas only half of the teachers in Liberia (46%) said they received their full salary. In Liberia, 54% reported being paid less frequently than normal, and 16% of salaried teachers did not receive any salary during school closures.

Providing opportunities for professional development was noted as an urgent need for ECE teachers. About half of teachers in Pakistan (47%) received some type of professional development support and with less than one-fifth of teachers surveyed in Liberia (13%). There was no professional support provided during school closures in Ethiopia. Instead, about one-third of ECE teachers in Ethiopia reported that their motivation for teaching was affected by school closures. About 22% said their content knowledge was affected, 19% said their pedagogical skills were affected, and 15% said their ability to monitor their students' learning was affected. About 40% of them also expressed the need for instructional support on how to provide remedial courses or accelerated learning courses when schools reopen to help children catch up. They asked for additional support on how to ensure the health and safety of their students when schools reopen.

The surveys asked pre-primary teachers about the accessibility to information (e.g., COVID-19 measures, home-based learning resources) from school principals or local governments. Nearly all teachers in Pakistan and more than 85% of teachers in

Ethiopia reported that they received this type of information from their schools. While all teachers in Pakistan received guidance on supporting children's learning during school closures, only one-third of teachers in Ethiopia received such guidance. Among teachers in Ethiopia who received guidance, most of them received guidance on counseling and/or parenting skills to help them communicate with parents. Notably, nearly all teachers in Pakistan met their principals regularly and received guidance from them during school closures. They also were able to reach out to their supervisors when needed.

In Liberia, teacher retention was a significant concern during school closures, given their vulnerability in receiving monthly salaries and the high proportion of volunteer teachers in the sector (Ministry of Education, Liberia, 2015). According to the survey, about 80% of teachers were still teaching in either the same school or a different school, compared to 12% who had stopped teaching, while the remainder could not be tracked. This figure may have been slightly lower for volunteer teachers, 73% of whom were still teaching in the same school, while the remainder could not be tracked.

Teacher's Support to Children and Families During the COVID-19 School Closures

Across the countries surveyed, some ECE teachers stayed in contact with children and families during school closures. Teachers were in regular contact with parents and children, with 33% of teachers in Ethiopia, 64% of teachers in Liberia, and 100% of teachers in Pakistan (Fig. 17.1).

Of those teachers in contact with their students and families, many of them communicated weekly (92% in Liberia and 37% in Pakistan) or daily (8% in Liberia

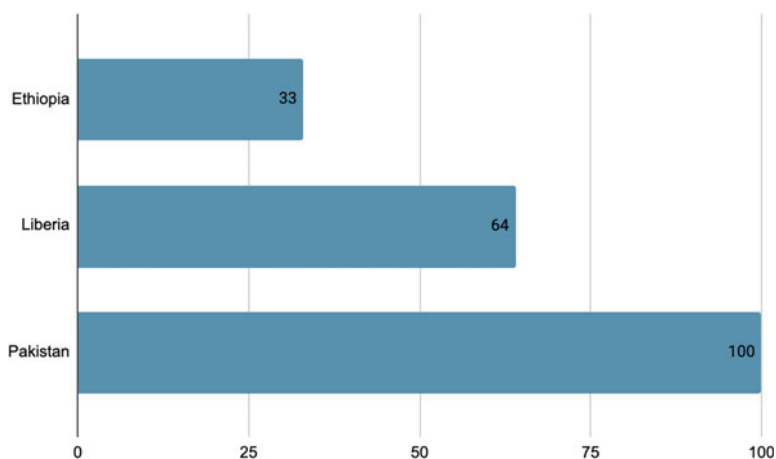


Fig. 17.1 Percentage of teachers reporting regular communication with children and families

and 43% in Pakistan). In Pakistan, 87% of teachers said they had regularly scheduled meetings with parents and caregivers, and 69% said their meetings averaged less than 10 min per session. In Ethiopia, of those in contact, most of the communication between teachers and families was regarding COVID-19 safety measures (88%), while a smaller percentage of the communication focused on providing home-based learning support using story or picture books, songs, and games (38%). In contrast, in Liberia, 69% of communication between teachers and families was regarding home-based learning and the provision of education materials.

Teachers' awareness and perception of distance learning during school closures varied across the countries surveyed. In Ethiopia, nearly all (98%) teachers reported that they were not aware of a distance learning program for ECE students offered by the government. About 25% of teachers in Ethiopia said they are confident in their ability to deliver distance learning, but most of them face barriers like a lack of technical equipment and training. In Liberia, 61% of teachers were not aware of any distance learning activities being offered by schools, the government, or other groups. In comparison, 81% of teachers from Pakistan were aware of distance learning activities offered to children by the government, and 83% of them were aware of financial and other support services launched by the government to support families. Of the teachers aware of distance learning activities, the most common resources mentioned were online coursework (26%), phone calls (24%), radio/TV programs (17%), and SMS/WhatsApp (15%). About 67% of them also said the materials provided to students for distance learning aligned with national or school curricula.

In terms of teachers' perspectives on parental engagement with their children's learning, 31% of teachers in Ethiopia believed that parents were able to support the learning of their children effectively at home. Of the teachers who reported that parents might not be supporting their children's learning, the most common reasons mentioned were low parental literacy levels (46%), competing work demands (38%), lack of learning materials at home (29%), and/or placed a low value on education (21%). In Liberia, of teachers who were aware of distance learning activities, 50% believed less than a quarter of students were participating in distance learning. In Pakistan, 61% of teachers surveyed believed that parents are supporting their children in distance learning most of the time.

ECE Teachers' Efforts to Reach All Children Inclusively During COVID-19

The pandemic exacerbated existing inequalities that prevail in education systems around the world. The findings from Ethiopia and Pakistan illustrate the inequalities that persisted and the strategies that pre-primary teachers used to address them during school closures. In Ethiopia, 63% of teachers felt their students were missing out on essential support such as peer-to-peer, emotional, and psychological support

during school closures. Among teachers who supported children during school closures, 69% adapted their learning materials to accommodate their poorest students, 38% adapted the materials for children with disabilities, and 31% adapted it for girls. In Pakistan, while overall rates of contact between teachers and children were high, 61% of teachers said they never used targeted strategies to accommodate the different needs of their students during distance learning, and 73% never used strategies to contact the hardest to reach students. About one-third of teachers in Pakistan (28%) reported having children with disabilities in their classrooms, and, of those, 55% said they took extra measures to support these students most of the time, 34% never took extra measures, and 11% sometimes took extra measures.

According to teachers from Ethiopia, rural location and poverty were the two most significant risk factors for students dropping out of school during the pandemic, with 33% of teachers naming rural students and 23% of teachers naming very poor students as being at a higher risk for dropping out. Teachers from Ethiopia also named girls (19%), children with disabilities (13%), low-performing students (6%), and children from pastoralist communities (4%) as at the most risk for dropping out.

ECE Teachers' Preparation for School Reopening

Teachers across the three countries surveyed were preparing for school reopening at the time of the surveys. They expected challenges in terms of teaching, students catching up, and following safety and health guidelines. In Ethiopia, 56% of teachers said schools made preparations to support O-Class students who are less likely to return to school after school reopening. In Liberia, 66% of teachers expect new teaching procedures to be put in place upon school reopening, while in Pakistan, 100% of teachers experienced new procedures when schools reopened in fall 2020.

Still, teachers have concerns. In Ethiopia, 38% of teachers were most concerned about students dropping out, 25% were most concerned about social distancing in classrooms without adequate space, 23% were most concerned about inadequate handwashing facilities, and 13% were most concerned about students' lowered performance. In Liberia, teachers anticipated that there would be new teaching approaches (38%), children would need to catch up on the content they missed (35%), and the need for supporting children with diversified strategies (22%). Nearly a quarter of teachers in Liberia (24%) noted their desire to implement newly learned teaching methods when schools reopen. These newly learned methods were mostly introduced through training by non-governmental organizations.

Discussions and Implications

The COVID-19 pandemic caught every education system in the world by surprise and resulted in a historic interruption in education services for 1.6 billion children from 167 countries (UNESCO, 2020). The ECE sub-sector was perhaps the hardest

hit, given that its political commitment and funding levels are still low compared to primary and secondary education. The analysis of the evidence gathered in the current study sheds some light on how ECE teachers in Ethiopia, Liberia, and Pakistan responded to school closures during the COVID-19 crisis in resource-constrained circumstances.

One promising finding is that the majority of teachers received their salaries during school closures, and many spent time gaining new skills for engaging with children and families virtually in Liberia and Pakistan. Some teachers in the study also received professional development opportunities on new ways of teaching and how to support psychosocial well-being. Although professional development opportunities for teachers in Ethiopia were limited, some of them received support on how to communicate with parents to help them take care of their children's learning and well-being at home. There has been a growing global movement toward holistic learning opportunities, and in the emergency situation brought about by COVID-19, some of these approaches are coming to fruition in low- and lower-middle-income countries.

In all three countries, teachers were in contact with children and families while schools were closed. In Pakistan, all teachers reported they were in communication with the families, but only 64% of teachers in Liberia and 33% of teachers in Ethiopia had been in contact with families during school closures. There was wide variation across the three countries on how much support the government provided to children and families during the school closures, but teachers in all three countries noted some types of government support such as radio/TV programming, online or printed materials, and phone and WhatsApp communications. Unfortunately, some of these virtual supports may have supported the children with the most advantages already—those whose parents could help them use technology, those with access to radio and television, and those in less remote areas. For the families who are marginalized, some schools initiated house-to-house visits with printed materials or books.

Teachers were concerned about students dropping out of school, especially the most marginalized children. There is anecdotal evidence that children will have experienced learning loss during the school closures and will need remedial support for years to come. To mitigate this loss, teachers, schools, and governments attempted to support children and families during the pandemic in new and creative ways. In Pakistan, the federal government offered tele-school to children staying at home during the pandemic (Ejaz et al., 2021). ECE-relevant shows were telecasted for an hour daily at 8 am on Pakistan's national television station. Content on ECE was also offered on local radio stations. However, households in many rural areas of the province could not access these technologies and thus could not participate in distance learning.

The findings have shown the importance of ensuring all teachers have access to timely information and guidance to support students. Each country addressed the information gaps in different ways. In Punjab, Pakistan, all provincial departments notified teachers to support learning for children in their homes and communities through accelerated and bridge learning programs during the first wave of school

closures. After the reopening of schools in November 2020, the priority was to access the telephone numbers of all parents to form WhatsApp and SMS groups to enable communication for administration, COVID-19 prevention, and learning activities. Teachers were given hybrid or online training and access to learning apps to share with parents, caregivers, and students. Training included ECE-specific modules focused on psychosocial support. The government is currently building an ECE Ed-Tech initiative consisting of digitized ECE training modules, teacher guides and caregiver manuals for ECE staff, and activity videos and other community-focused videos relevant to ECE.

While investing in early childhood development is perhaps the smartest investment a government can make, we found that in all three countries, older students were prioritized over the youngest children. Despite immediate efforts for distance learning led by the government in Ethiopia, they provided radio and TV lessons for primary or secondary students only. Some private pre-primary schools and NGOs developed remote learning materials for pre-primary children; however, it is not clear to what extent it has reached families in urban and rural areas. In Liberia, the Ministry of Education deferred to the instructions provided by the Ministry of Health and the National Public Health Institution of Liberia, who advised caution in reopening schools. Under these constraints, secondary school students were prioritized, given they would be sitting for regional examinations. In Pakistan's National Resilience Plan for Education, developed in June 2020, there was no mention of ECE, nor was there any increase in funding for ECE in Punjab. This exclusion impacted how ECE teachers were supported, how parents were engaged, how home learning took place during the lockdown, how a systems-level strategy was devised, and ultimately how the learning losses incurred in early years during the pandemic will be mitigated moving forward.

Resources remain a barrier to consistent ECE services in low- and lower-middle-income countries during the pandemic. In Liberia, although the Ministry of Education published an Emergency Response Plan, this required a budget of \$32 million, of which reportedly only half had been raised from donors at the time of writing. This lack of resources meant that many activities were not delivered and that the selection of activities was determined in part by donors' sectoral interests. In Ethiopia, although financial resources for pre-primary education remained very low over the decade (Rossiter et al., 2018), the COVID-19 crisis made some of the schools redirect the budget for pre-primary classrooms to other areas, such as printing learning materials for upper grades or purchasing masks and sanitizers.

Finally, a lack of infrastructure reduced the range of viable responses to the pandemic. In Liberia, long distances between schools, difficult terrain and poor-quality roads, and rising fuel costs provided substantial challenges to the distribution of resources and the delivery of in-person programs. Interviewees in this study were aware that limited and inequitable access to radio was a significant limitation of the Teaching by Radio program. Regarding long-term improvements to the education system ("build back better"), interviewees in this study did not anticipate significant changes to teaching and learning in Liberia in the long term, owing to insufficient resources in-country to institute significant reform. Similarly, in Ethiopia, the

education systems' incoherence due to inadequate resource allocation and poor alignment and coordination among key ECE stakeholders becomes significant barriers to improving ECE quality, especially during the COVID-19 pandemic.

The findings of this study have implications for ECE systems around the world. First, it is important to ensure compensation continues for ECE teachers during school closures to sustain the workforce. They often experienced excessive workloads because they spent time communicating with children and families and participating in professional development to gain new skills. Second, it is important to invest in remote learning programs for pre-primary education by the government that targets the most marginalized. Without making specific plans to connect the most remote and impoverished students, remote learning strategies can deepen inequities. Third, ensure communication between the schools, teachers, and educational authorities so families receive consistent messaging when they contact various actors. Fourth, government and key stakeholders must take action to support the resilience of students to shocks, to reduce the vulnerability of students during crises. ECE stakeholders must tirelessly advocate for the high returns of investing in ECE, and the negative impact on brain development that neglect in the early years can cause. Finally, it is important to note that "building back" doesn't necessarily mean "building back better." There is a strong pull for educators to seek comfort by going back to pre-COVID-19 ways, even if the previous system was not meeting the needs of all learners. There is a window of opportunity to invest in professional development in the ECE workforce, use remote learning strategies to reach young children, build a close relationship with families through frequent communication and provide accelerated learning interventions to the most marginalized. This calls for a novel way to support ECE educators to build up more resilient early learning systems to the future pandemic.

Strengths and Limitations

This study was one of the first studies to examine the experience of ECE teachers in low- and middle-income countries during the COVID-19 school closures. The research teams in each country worked closely with the government and development partners, including the World Bank, to develop survey items that were relevant to the situations in each country and had the potential to inform policy decisions during this crisis.

There are several limitations to the generalizability of the study. In all three countries, teacher surveys were undertaken as part of pre-existing evaluations of interventions within the Early Learning Partnership. Consequently, the sampling strategy for these surveys was not designed to be representative at the national or regional levels. It, therefore, requires extra caution to middle-income countries overall.

Conclusion

During COVID-19 and beyond, the expanded role of pre-primary teachers to support parents and caregivers at home with their young children will continue to be critically important. Supporting parents to promote their young children's education and development during lockdowns and restricted movement can help combat and reverse learning loss trajectories during this tumultuous time. According to the World Bank, early childhood programs that target parents are a "smart buy" for improving learning in low- and middle-income countries (Global Education Evidence Advisory Panel, 2020), but more research and evidence is needed to fully understand the short- and long-term benefits of these interventions.

There was a spirit of innovation as teachers quickly shifted to using technology to communicate with children and parents in the case of Punjab, Pakistan, and radio, TV, and phone communications in all three countries. In some cases, the pandemic has allowed teachers to learn new approaches that can help them resolve long-standing problems of learning poverty. In some ways, the pandemic may have acted as a catalyst for change. It has highlighted the need to focus on equipping teachers with the necessary skills to allow them to not only reach marginalized children now but also on how to handle future crisis situations that will inevitably arise.

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Chapter 18

“It’s Just Too Much”: COVID-19 Effects on Head Start Teachers’ Lives and Work



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The COVID-19 pandemic disrupted family life and education systems worldwide, placing billions under stay-at-home orders, including communities in 42 US states and territories (Moreland et al., 2020). More than 1.6 billion students experienced school closures (Saavedra, 2020), with millions abruptly shifting to online learning (Donohue & Miller, 2020). The fallout was widespread in the US early childhood education and care (ECEC) sector, as 20 states implemented class size restrictions (Sun & Russell, 2021) and 16 closed child care centers, affecting 21 million children (Donohue & Miller, 2020).

The pandemic also had far-reaching effects on the US’s only nationwide ECEC program, Head Start, a federally funded program designed to promote the early development and school readiness of children from low-income families (Office of the Assistant Secretary for Planning and Evaluation, 2021). By March 24, 2020, most Head Start and Early Head Start sites were closed (Administration for Children and Families, 2020), although sites were encouraged to continue services as much as possible, per local safety guidelines. Head Start closures were particularly disruptive because the program serves families at or below the poverty level (Office of the Assistant Secretary for Planning and Evaluation, 2021), meaning those who (1) stand to gain the most from ECEC programming, and (2) were most vulnerable to the negative effects of the COVID-19 pandemic (Donohue & Miller, 2020).

Prior to the pandemic, children from low-income families experienced more challenges than their more affluent peers. Challenges include greater risks of exhibiting behavior problems (Reardon & Portilla, 2016), needing special education services (Mann et al., 2007), being chronically absent (Ehrlich et al., 2018), and facing opportunity gaps that manifest as skills gaps (Qi & Kaiser, 2003). The

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pandemic's disruptions have spurred concerns that the pandemic exacerbated these disadvantages for Head Start families (Donohue & Miller, 2020).

Beyond Head Start families, Head Start *teachers* are also likely to be low-income (Whitebook et al., 2014). Therefore, they too were more susceptible to negative effects from the pandemic (Dooley et al., 2020). In fact, as Head Start encourages parent involvement in a variety of ways—including participating in meetings with staff and other parents, providing financial support/linkages with essential services, and career opportunities that offer the education and classroom experiences for parents to become teachers' aides or teachers (US Department of Health and Human Services, 2020)—many Head Start teachers are members of Head Start families themselves.

In this study, we explore the experiences of 19 Head Start teachers in a mid-Atlantic city as they adjusted to pandemic-related changes, including transitioning to online learning. This study contributes to a growing literature on education during the pandemic by describing the experiences of low-income families and ECEC educators. It also provides a deeper understanding of the working conditions of Head Start teachers, a critical labor force that serves nearly 1 million materially disadvantaged US children per year (Kids Count Data Center, 2020). Understanding this workforce is important because teachers' ability to serve children is associated with their own well-being (Jeon et al., 2019a), so constraints may have downstream effects on children. By exploring Head Start teachers' experiences throughout the pandemic and how COVID-19 affected their work, this study seeks to illuminate ways to support this essential workforce.

Background

This literature review comprises four themes: the ECEC workforce and its constrained resources, ECEC teachers' well-being, COVID-19 effects on ECEC teachers, and COVID-19-related challenges to developmentally appropriate practice.

The ECEC Workforce: Impassioned Yet Under-Resourced

In general, ECEC teachers report high levels of engagement with their work (Bullough et al., 2012). ECEC teachers demonstrate significant intrinsic motivation, and they have a strong commitment to their students (Bullough et al., 2012). Teachers also tend to report high levels of overall job satisfaction (Bullough et al., 2012), even when they report being dissatisfied with certain aspects of the job, such as compensation (Hall-Kenyon et al., 2014). Together, ECEC studies suggest that the ECEC workforce is passionate about work and finds teaching young children to be highly motivating and intrinsically rewarding.

At the same time, US ECEC teachers experience a profound dearth of material resources, with many receiving wages considered to be “unlivable”, 73% reporting concerns about paying bills, and half reporting concerns about having enough food (Whitebook et al., 2014). The ECEC workforce poverty rate is 7.7 times higher than the rate among US K–8 teachers (McLean et al., 2021). Many ECEC teachers experience some level of food insecurity related to inadequate wages (Johnson et al., 2021). Low pay has implications for the ECEC workforce because, with Head Start and other ECEC teachers often getting paid at or below the poverty line (Whitebook et al., 2014), many teachers may experience financial hardship and stress. In addition, low wages are linked to high rates of teacher turnover (Hale-Jinks et al., 2006), which creates an unstable workforce that may impact the quality of teaching and child outcomes. Further, teachers with lower wages are also more likely to work in programs that do not offer benefits such as health insurance, paid sick leave, paid time off, or ongoing professional development (Otten et al., 2019; Phillips et al., 2016), all of which may improve well-being.

Low compensation is only one aspect of ECEC teachers’ challenging working conditions. Boyd (2013) interviewed 32 ECEC teachers about their experience and intention to remain in the field, finding that, although teachers found their work to be meaningful, most did not plan on staying, because of compensation-related inadequacies but also a lack of support at their jobs (Boyd, 2013). Similarly, Wells (2015) studied newly hired Head Start teachers, finding that teachers who did not have a positive relationship with their supervisor or who did not like their work environments were significantly more likely to leave their positions within the first half of the school year, and indeed, more than one-third (36%) of the teachers in the study left during this period. Likewise, many child care providers perceive a lack of respect from families and the general public for their work, and they are often viewed as mere babysitters rather than valuable ECEC providers (Faulkner et al., 2016). Together, workplace studies suggest that the ECEC workforce tends to lack both tangible (e.g., wage) and intangible (e.g., morale) supports.

As a federal program, Head Start has more reliable funding and regulation than the rest of the highly variable (Kagan & Kauerz, 2007) US ECEC field, and this may lend it greater stability. However, the Head Start workforce is still vulnerable to constrained resources. For instance, at least half of Head Start educators are required to have a bachelor’s degree focusing on early childhood education (US Department of Health and Human Services, 2020), and staff are required to obtain 15 hours of professional development per year, provided by programs (U.S. Department of Health and Human Services, 2020). However, although Head Start teachers, on average, earn higher salaries than teachers in other ECEC settings, in 2017, the mean annual salary for a Head Start teacher was \$30,579 (Bernstein et al., 2018), compared to \$58,773 for a public elementary school teacher (Snyder et al., 2019). Thus, Head Start educators are more likely to be low-income than teachers of older children.

In addition, Head Start teachers may experience the interpersonal and environmental dissatisfaction (Wells, 2015) and lack of respect (Gerstenblatt et al., 2014) endemic to the broader ECEC sector. Thus, despite their *relative* financial stability,

they are still likely to be low-income, and despite their relative professionalization regulations, they are vulnerable to low morale. At the same time, they are uniquely important because they provide much-needed support for materially disadvantaged children and may experience particular demands because such children are more likely to present behavioral and educational challenges (Ehrlich et al., 2018). Therefore, it is important to understand the challenges and experiences of Head Start teachers during the COVID-19 pandemic.

ECEC Teacher Well-Being

Given the challenges faced by ECEC teachers, there has been an increased focus on their well-being (Eadie et al., 2021; Swigonski et al., 2021). This has become a particularly crucial area of research as a growing body of literature suggests that many teachers struggle with poor mental and physical health (Johnson et al., 2021). Teaching is known to be one of the most stressful professions, with almost half (46%) of teachers nationwide reporting high levels of daily stress (Gallup, 2014). ECEC teachers also report high rates of depressive symptoms (Lessard et al., 2020). In addition, ECEC programs are often challenging places to work, as educators often struggle with having few social supports and a lack of autonomy (McGinty et al., 2008; Schaack et al., 2020).

Teacher well-being has implications for children, as teacher stressors are negatively associated with teacher–child interaction quality, classroom quality, and student outcomes (Cassidy et al., 2017; Greenberg et al., 2016; Jeon et al., 2019b; Johnson et al., 2021). Plus, low wages are associated with poor classroom management and teaching practices (Johnson et al., 2021) which, in turn, predict fewer gains in children’s language and literacy skills (Hong et al., 2019). In addition, higher stress among ECEC teachers is associated with teachers’ negative perceptions of children’s behavior problems (Jeon et al., 2019b). Overall, teacher stress and well-being repeatedly have been found to be directly associated with child outcomes or indirectly associated through teaching practices and classroom quality. Thus, understanding more about educator stressors can contribute to improvements for both students and teachers.

Teachers also may deal with poor physical health and a lack of access to related resources. For instance, Lessard et al. (2020) examined 13 studies on teachers’ physical health and found that ECEC providers reported high rates of obesity and being overweight, as well as low activity level, poor diet, and high prevalence of chronic diseases. Physical health may have an impact on teaching practices. Christakis (2016) notes, “Sometimes the distance between a caregiver and child comes from something as mundane as a teacher’s inability to keep up physically with an active group of preschoolers” (p. 262). Taken together, these studies show that teachers may experience considerable physical and mental health challenges, yet through a combination of factors including time, money, and energy, they are frequently unable to access personal and professional supports. Thus, understanding

COVID-19’s impacts on the health and well-being of ECEC teachers can contribute to a greater understanding of how to better support ECEC teachers and, in turn, children.

ECEC Teachers During the COVID-19 Pandemic

As low-wage workers, ECEC teachers were particularly vulnerable to the effects of the COVID-19 pandemic (Kinder & Ross, 2020). Low-income workers likely had less “cushion” to adapt, would feel delays in unemployment payments keenly, and would be more likely to have family members who were essential workers and therefore at heightened risk for contracting the virus. Also, low-income individuals are less likely to be insured and have quality health care (Centers for Disease Control, 2013) and are more likely to have preexisting conditions, such as obesity, diabetes, and heart conditions, that increase the risk of severe COVID-19 symptoms (Centers for Disease Control, 2021). Finally, low-income families were less likely to have resources to transition to shutdown life, such as reliable Wi-Fi and technology (e.g., tablets) for remote learning (Bacher-Hicks et al., 2021), which may have created additional burdens.

In addition, ECEC workers who serve low-income families, such as Head Start teachers, faced heightened professional challenges during the pandemic (Dias et al., 2020). Teachers in high-poverty settings often work with children who have experienced abuse, neglect, poverty, hunger, or homelessness (Bryk, 2010). Teachers serving such students encounter a “three-strike problem . . . not only are the schools highly stressed organizations, but they exist in challenged communities and confront an extraordinary density of human needs every day” (Bryk, 2010, p. 29). For many teachers, the COVID-19 pandemic could add new and amplify existing stressors, making teaching daunting. This is especially true for Head Start teachers, whose families were less likely to have reliable Internet access, devices, and adequate finances to support online learning (Hamilton et al., 2020).

Indeed, US K-12 literature suggests that disparities in access and quality of educational services based on socioeconomic status (SES) increased during the pandemic. For instance, one problem that teachers faced was decreased student attendance in online classes (Hamilton et al., 2020; Kraft et al., 2020). A survey of K-12 teachers found that 75% of students in low-poverty schools consistently attended and participated in online classes during the pandemic, compared with just 51% of students in high-poverty schools (Kraft et al., 2020). This raises the question of whether attendance for young children was an even greater challenge, given that families with limited resources and access may prioritize work or older children’s educational needs.

Moreover, under normal circumstances, children from low-income families are more likely to miss school because they are more likely to experience barriers to attendance, such as parent stress, health problems, contagion via overcrowded housing, and lack of transportation (Chang & Romero, 2008). The pandemic

exacerbated many of these barriers and opened new ones related to online learning. For example, children from families with limited access to the Internet and technological devices were more likely to miss school (Hamilton et al., 2020).

In addition, low-income families were more likely to work in industries, such as the retail and hospitality fields, that required physical presence or had widespread layoffs (Ross & Bateman, 2020). This means that parents in low-income families were more likely to either lose their job and experience financial stress that affected children's learning *or* to have jobs that could not be performed remotely, thus restricting parents' ability to facilitate attendance and participation (Karpman et al., 2020; Parker et al., 2020). One potential implication of this is that many low-income children did not receive developmentally appropriate guidance while learning at home.

The pandemic may have had pedagogical implications as well. A survey of US K-12 teachers showed that teachers in high-poverty areas were more likely to focus on reviewing material in their online classes rather than teaching new material (Hamilton et al., 2020). Again, such findings point to an opening for exploration of pandemic online learning in ECEC settings. If this trend extends to high-poverty ECEC settings, there may be severe setbacks in children's school readiness, which could have an impact on children's educational attainment long-term. An added consideration is the unique pedagogy ECEC requires because of young children's developmental needs.

ECEC Developmentally Appropriate Practice and COVID-19

Online learning is particularly challenging for young children because they have sensitive learning needs, as evidenced by developmentally appropriate practice (DAP) being the cornerstone of ECEC learning and teaching. DAP refers to "methods that promote each child's optimal development and learning through a strengths-based, play-based approach to joyful, engaged learning" (NAEYC, 2020, p. 5) and stresses that children learn through relationships and social experiences (Christakis, 2016). For preschool-aged children, core tenets of DAP include an emphasis on play-based learning and instruction, with the understanding that play is essential for healthy development in young children; supporting physical, cognitive, social, and emotional development; use of culturally informed practices based on each child's unique background and cultural context; and creating an engaging curriculum (NAEYC, 2020). Head Start emphasizes DAP in its pedagogical framework (Head Start, 2020).

In the context of COVID-19, *solutions* (i.e., online learning), while essential for physical safety, potentially generated *challenges* for young children, who were both deprived of critical social experiences and subjected to potentially developmentally inappropriate online learning (Donohue & Miller, 2020). Moreover, children from high-poverty backgrounds are more likely to have special needs (Committee to

Evaluate the Supplemental Security Income Disability Program for Children with Mental Disorders et al., 2015), and online learning may compromise their classroom interventions and adaptations.

Given DAP’s emphasis on play and social interactions, it is unsurprising that, prior to the pandemic, many ECEC teachers did not have experience or training on how to teach virtually, much less on how to incorporate DAP into online instruction, and that they found the sudden transition to online teaching to be challenging and difficult (Dias et al., 2020; Jones, 2020). Jones (2020) found that, likewise, two-thirds of young children and half of parents had difficulty adjusting to online learning. Thus, the effort required to engage remotely led to greater workload and stress for teachers, who became additionally responsible for supporting attendance and engagement among their families while navigating the transition to an online environment themselves (Szente, 2020). For instance, teachers were tasked with the responsibility of communicating more with parents, and they often assumed additional roles such as providing tech support to families (Szente, 2020). For families who did not have access to the technology or resources needed for online classes, teachers had to find creative ways to engage and to get the families connected with the materials they needed (Dayal & Tiko, 2020; Szente, 2020). Thus, teachers struggled with new and unprecedented challenges (Hamilton et al., 2020; Kraft et al., 2020). This study aims to extend previous findings by exploring what made online teaching and learning difficult, and thereby potentially illuminating ways to strengthen DAP and ECEC.

The Present Study

On March 24, 2020, the federal Head Start office ordered that most sites close for in-person instruction and that sites continue to offer their services remotely, “to the extent possible” (Office of Head Start, 2021). The office also ordered that staff continue to receive wages and benefits (Office of Head Start, 2021). In the mid-Atlantic city in which we conducted our study, Head Start classes transitioned to online learning shortly after site closure and continued through the end of the school year.

Although Head Start is regulated federally, it is administered by local partners. Thus, sites had some autonomy in how to adjust to the pandemic, so there was variation in protocols, preferred technology (e.g., Class Dojo, a parent–teacher communication tool available via smartphone/tablet application or browser), provision of laptops, etc. Moreover, each site had its own staff and administration and therefore represented a unique workplace culture and norms.

To contribute to a deeper understanding of COVID-19’s impact on young children from low-income families and their teachers, we use our sample of 19 Head Start teachers from 11 sites in one US city to explore the following questions:

1. How did COVID-19 affect Head Start teachers personally and professionally?
2. How did they adjust to online learning?
3. What needs did they perceive, and how did they feel these needs were or were not met?

COVID-19 exacerbated existing challenges and inequities in the ECEC sector, which opened a unique opportunity to explore the experiences of educators and interpret how ECEC programs can be better and more resilient, and how teachers (and in turn, students) may be better served. Thus, by pursuing these questions, we aim to also contribute to the discourse on ECEC educator supports. Exploring the experiences of Head Start teachers as they navigated this transition, as well as their perceptions of the supports and obstacles they encountered, may inform future policy and resources offered to teachers.

Method

The data are from a larger study about Head Start teachers' well-being conducted before and during the COVID-19 pandemic. All data collection procedures were approved by the Johns Hopkins University Homewood Institutional Review Board (IRB). The team obtained a list of Head Start sites in a mid-Atlantic city and randomly selected 22 sites. After obtaining approval from site directors, research team members visited sites (pre-pandemic) to recruit teachers and distribute a survey. They returned about two weeks later to collect surveys. During this process, the team asked teachers if they would be willing to participate in a follow-up interview, to which 35 responded in the affirmative and provided contact information. A few weeks after we collected surveys, Head Start sites closed. During closures, in July and August 2020, a team member reached out to all 35 teachers to schedule interviews. Nineteen teachers from 11 sites were available for interviews. All respondents were female, and most respondents were Black/African American. The average length of an interview was 34.5 minutes. Interviews occurred via Zoom, in accordance with safety protocols, and were audio-recorded. The same team member conducted all interviews. The interview guide included questions about teachers' health, program culture, and experiences throughout the pandemic so far. The interviews were structured, but respondents were free to elaborate on their responses. Each recording was transcribed verbatim by one team member, checked three times by alternating team members, and then checked a final time by the team member who conducted the interviews.

Data were de-identified, with respondents assigned a number, and the crosswalk as well as all surveys and teacher information were securely stored in a locked cabinet in the PI's office, in accordance with IRB protocols. Transcriptions and audio files were kept in a secure online database to which only IRB-approved team members had access.

Primary coding was structural (Saldaña, 2009), with codes based on the interview guide. Three team members independently coded two interviews, discussed until reaching 100% agreement and repeated this process for five more interviews. Then two team members coded four more interviews and conducted inter-rater reliability tests, which ranged from 97.86% to 99.11%, and kappa values, which ranged from 0.64 to 0.80 (fair to excellent agreement). They again discussed until reaching 100% agreement. The team split the remaining eight interviews between two team members, who coded them independently, swapped, and then shared with a third team member to verify. All achieved 100% agreement. Finally, team members conducted a matrix analysis, determining code overlap for coded sections, which informed findings.

Findings

Findings coalesced around three main themes: (1) dedication to work that was both demanding and fulfilling, (2) the pandemic exacerbating existing stressors and adding new ones, and (3) inadequate resources for online learning.

Theme 1: A Demanding but Meaningful Job

Overall, 53% of teachers described a deep emotional and mental connection to their work and took pride in the effort it demanded. Teachers repeatedly expressed affection for students. In some cases, this affection was mixed with concern for children’s health and potentially chaotic or unsupportive home lives. For instance, Respondent P was “worried about if they’re getting enough food.” Likewise, Respondent I said she had observed harsh behaviors in some parents, which made her worried about children spending extensive time in their home environments during lockdown. Although there were some bright spots, with teachers finding creative ways, such as drive-by visits, to connect with their families, an overwhelming theme was that teachers were affectionately missing their students. Respondent A exemplified this sentiment, saying, “I love to hug my children and see their smiles. So not being able, you know, to see them and talk to them. . . . I’ve been doing this for over 20 years—so I really miss my children.”

Moreover, teachers felt that in-person interactions were crucial for teaching young children. Online learning, then, made them feel less effective, which was frustrating and generated worry about long-term impacts on children’s development. For example, Respondent G identified “not being able to be there for my students as much [as in the classroom]” as a top way that the pandemic had negatively affected her well-being. Going a step further, Respondent C described classroom closures as depressing and seriously detrimental to students:

... [P]robably the biggest point of depression ... is that I miss the classroom. I understand how important the classroom is. The hands-on to the students we are reaching. And it's taken away. And there's nothing I can do about it. And the long-term that they never, if no one in their circle ever gets COVID, they're still going to be impacted for life.

Thus, most teachers described Head Start teaching jobs as not only entailing hard work but also offering deep meaning. They expressed dedication to their jobs, pride in their work, and a desire to perform well. Beyond these job-related sentiments, they were affectionate and fond of their students. From this meaning-rich and motivated baseline, changes stemming from COVID-19 generally had a large and negative impact on Head Start teachers' work and job satisfaction.

Theme 2: Escalating Stressors During the Shutdown

The most consistent and strongest theme was the stress resulting from online teaching. All but one respondent (95%) reported struggling to transition to online learning with neither learning materials nor the funding to acquire them. Moreover, teachers described paltry attendance, with only "one or two" students logging in, which was "depressing." Teachers also struggled to keep children engaged. Respondent S described searching for developmentally appropriate resources. "We work with 3, 4, 5-year-olds, so their attention span is, like, almost non-existent," she said. Respondent B articulated her frustration of not being able to appropriately support students. "If the child was with me, I make sure that, you know, show him how to hold the pen, how to use it," she said, adding, "Online, there's nothing we can do."

The core issue was that online learning is at odds with the fundamentals of ECEC. While pedagogy for older students is grounded in reading and writing, which translate more easily to virtual environments, ECEC is grounded in tactile experiences. Many stressors flowed from this fundamental mismatch. Further, in one sense, parents needed to be co-teachers. While parents were only tangentially involved in classroom instruction, they had a core role in online instruction. This meant that instruction was vulnerable to family challenges. For instance, Respondent F described how "The parents got a lot going on," adding that Head Start students were likely to be "the youngest child" in a family and therefore "not really a priority to get online when you got school-age students."

Learning from home meant children traded a structured classroom environment for an informal one, and teachers felt this had a negative impact. Respondent G said,

But we have children that's laying in the bed, they're laying on the couch, instead of their parents putting them in an environment where they know, like, this is time for school. So, they can't take it serious ... because it's not giving them the structure that they need.

Exacerbating tension was the suddenness of the pandemic. Every teacher in our sample said educators were completely unprepared. "This was something totally new to all the teachers and we would have never thought that something like this would happen," Respondent G said. The speed and scope of the shift were daunting.

Respondent C described preparing for the 2020–21 school year, “. . . [I]t’s like starting from scratch. And it’s mind boggling. It’s overwhelming. And we haven’t had training. I don’t know if training’s coming.” Several teachers mentioned that online lesson plans required creativity, indicating additional cognitive burdens, and many teachers struggled to create learning environments in their homes. Respondent E said, “. . . [W]hen you transition to home it’s like, uh-oh, now you’re trying to be creative or come out-of-pocket to get some materials.” Lessons had to incorporate materials that low-income families were likely to have on hand because parents often could not afford buying materials, and moreover, teachers did not want to risk exposing parents to infection by asking them to shop.

In addition, technology problems were widespread. Families and teachers experienced spotty or nonexistent Internet connections, inadequate devices, and a lack of technological know-how. Respondent P said, “A lot of the parents didn’t have the equipment they need,” while Respondent L said, “Some teachers don’t have any access at all to a computer,” and Respondent I said, “I didn’t have the Internet or none of that,” and described the chaos of relying on her phone’s unstable hotspot function, which caused the connection to go “in and out, in and out”. Thus, most teachers felt heightened stress from greater demands, inadequate resources, and the frustration of what they perceived to be forced and unavoidable compromises to quality teaching.

These challenges notwithstanding, many teachers described improvement over time. As technology supports made their way to teachers and families and processes cohered, online teaching and learning got easier. Respondent E said that after a “rocky” start, “everybody got adjusted” and was “getting used to what’s going on and the plan is starting to come up into process.” Crucial to Respondent E’s positive transition period was a supervisor who allowed teachers to adjust workloads and was receptive to their personal needs.

Still, at other sites, teachers perceived large upticks in workload. Many described growing responsibilities made worse by shifting demands and opaque communication from administrators. A particularly frustrating new requirement was calling parents daily. Respondent J described being caught between calling parents “too much” and fielding administrators, who checked up on teachers who had not made their calls. Respondent B said, “It was really stressful and challenging, you know, to talk to the parents every single day, every single day, every single day I have to remind them that, okay, the child has to be connected.” Though teachers overwhelmingly found this task burdensome, Respondent E found it beneficial, saying,

[W]e grew much closer because they had to answer the phone and had to talk to them and everything. . . . So I think the family bonds has strengthened up between me and my parents. Especially for the ones who . . . worked so much.

Thus, the teaching experience was one of the rapidly growing demands and limited resources. In addition to adjusting lesson plans and instructing in a way that felt unnatural, they had to obtain devices, establish Internet connections, troubleshoot hardware glitches, teach themselves how to use software, and call parents daily. At the same time, they faced low attendance, paltry engagement, and negotiation of a

new role for parents. The workload took a toll. Respondent D voiced her frustration, saying, “I’m doing this person’s job and this person’s job and my job.”

Beyond these work-related frustrations, teachers reported stressors in their personal lives. The most significant stressors were related to family income stability and job security, caring for children in the home, and COVID-related illness or death. Also, although some teachers improved their physical health by having more time for rest, many mentioned weight gain from being more sedentary. Moreover, many Head Start teachers were already in precarious financial situations, meaning they did not have the reserves to weather family layoffs, added expenses, or illness. Exacerbating this were problems with unemployment benefits for those who opted to take it, with respondents saying they still had not received payments months after enrolling. Thus, several teachers described tenuous financial situations as becoming dire. For instance, Respondent Q shared that she faced a difficult choice between paying rent or having enough money for food. “Sometimes I open the refrigerator and it’s just nothing there,” she said. To survive, her family relied on a food bank and friends from church for financial support.

In addition, teachers reported deep fears that they or their loved ones would contract COVID-19. Respondent S had lost multiple family members to COVID-19 and had more in the hospital at the time of her interview. Respondent C said she was “acutely aware” of the risk to the point of being in a state of “paranoia.” Respondent D described a consuming fear:

Will I die? Will my mom die because she elderly? Um, I’m just, excuse me, always going through scenarios in my mind. And I mean, on the outside, I might look fine. But on the inside, like, I’m just, you know, what if this happens?

Many teachers said that added child care responsibilities were a source of great stress, with Respondent N saying that balancing work and child care was the single most stressful pandemic experience. Teachers had to care for their own children or grandchildren who were suddenly at home full-time and needed help with their own online schooling. Respondent G said she was stressed by being at home all day every day with her two children, both of whom had special needs. Her work previously had provided an “outlet,” and without it, she had gone back on stress and anxiety medications to help her cope with an exhausting home environment.

Theme 3: Tangible and Intangible Resources During COVID-19

Despite the extensive challenges that online teaching presented, teachers consistently expressed a desire to do it better. More than half of respondents (53%, or 10 out of 19) said that a top resource they desired was training in how to do online teaching. “Virtual is a big thing right now, so show me how to keep children engaged while I am teaching,” said Respondent J. Respondent C wanted guidance on how to

“navigate this virtual learning and rewrite every one of my lesson plans to accommodate a virtual classroom versus a real classroom.” She was desperate for training on “how do you teach a 3-year-old . . . through a window?” Beyond pedagogy-specific training, some teachers needed training in the fundamentals of technology. Respondent C said she was “tech savvy” but that many of her peers did not have background knowledge or comfort with technology, which presented a challenge. Teachers had to use new software without training: “You had us using Class Dojo, but we didn’t get trained properly to use Class Dojo,” Respondent J said.

Furthermore, the pandemic exacerbated some sites’ communication and morale challenges. While some teachers reported proactive and transparent communication from administrators, others described the opposite. Respondent R said teachers at her site learned from the program website that their program would be remote until November 2020. Although many teachers felt empathy for administrators, they still wished for improved communication. As Respondent O said, “Of course, everybody was thrown into it, including them . . . they kind of did the best they could, but we were just wishing it would have been different.”

Similarly, some teachers perceived appreciation and support from their administrators, while others reported a lack thereof. Respondent E described open two-way communication between teachers and supervisors, which allowed leadership to adjust workloads to better accommodate teachers. Similarly, Respondent R described a compassionate supervisor who provided support with challenges related to teaching online. Teachers were appreciative of site leaders who provided material resources such as laptops, called to see how they were doing, and made a good-faith effort to keep them abreast of changes. However, for other teachers, the pandemic exacerbated existing tensions regarding a lack of perceived professional respect and support. Respondent F described being told at the last minute a plan had changed:

. . . [A]ll my hard work I’ve been doing to put in to make sure I meet the needs of the program. And then down the ladder real quick, you know, a day or two before, they say we not doing it.

At other times, supports were functionally nonexistent because of logistical problems. Respondent H said her site had offered resources, but the process of obtaining them took till the point they were no longer needed. Respondent R said that inadequate material resources were an “ongoing issue no matter whether we’re in school or at home.”

In this way, COVID-19 exacerbated existing problems regarding inadequate material support and low morale. At some sites, a little bit went a long way, with teachers deeply appreciative of gestures like phone call check-ins or laptops. Elsewhere, teachers felt taken advantage of and unappreciated, describing environments with little goodwill capital to draw from when crisis struck.

Discussion

In this study, we explored Head Start teachers' experiences as the COVID-19 pandemic closed schools and forced shutdowns during 2020. To do so, we interviewed 19 teachers in a mid-Atlantic city about their work and personal lives during the pandemic. Our findings contribute to not only an understanding of how this vital workforce was resilient and adapted to a historic crisis but also offer implications for the ECEC field.

Above all, our study shows that the COVID-19 pandemic diminished the strengths and exacerbated the weaknesses of ECEC work. First, consistent with previous ECEC literature (e.g., Bullough et al., 2012), Head Start teachers expressed a deep commitment to their work and joy from students and face-to-face interactions. Thus, given that their job satisfaction was tied to in-person teaching, teaching online meant less satisfaction, more frustration, and an exhausting overhaul of the basic operations of the job. Teachers both lost a source of joy and gained burdens regarding new technology, adjusting lesson plans, calling families daily, and trying to engage with children through online platforms. Still, a commitment was apparent, as they consistently asked for training on how to teach online.

In some ways, this indicates that ECEC policy and administration could support teachers by ensuring access to the Internet and hardware, as well as training on online instruction and basic technology skills (e.g., word processing, file-sharing, and video conferencing), which are likely to only be more necessary in education and the rest of modern life. However, in another way, online instruction for young children is fundamentally at odds with their development. For instance, the American Academy of Pediatrics (2016) recommends that "screen time" for children between 2 and 5 should be limited to one hour per day of high-quality programming together with adults. Moreover, "screen time" may even be harmful for young children, as it is negatively associated with sleep quality (Beyens & Nathanson, 2019) and the integrity of neural development related to language (Hutton et al., 2020). Plus, only a few teachers reported being trained on or even familiar with digital learning tools. Likewise, ECEC lessons are often based on physical materials (e.g., math manipulatives, centers) that teachers and families did not have at home. Exacerbating these challenges is preschool-aged children's inability to manipulate technology or sustain attention and engagement independently, which indirectly added a burden on parents to "attend" class with their young children. Thus, a more fruitful intervention may be to support family caregivers in home learning or in creating safe in-person learning formats (e.g., pods, reduced class sizes, alternating schedules, and outdoor classes).

Teachers spoke of profound stressors, both related to work and their personal lives. While little could be done to anticipate the pandemic, the fallout exacerbated weaknesses in the ECEC system, such as teachers' perceptions of little respect, care, or professionalism from the administration. Particular areas of growth are communication with leadership, responsiveness regarding workload, and following through on providing resources. Our findings suggest that better communication between

teachers and leaders would improve the workplace environment and motivation. Indeed, it was striking how seemingly small efforts could mean a great deal: A supervisor simply calling to ask how teachers were doing was deeply meaningful. Thus, our study suggests that culture-building interventions and improvements to communication and interpersonal connections may help improve ECEC overall, not just in crises.

Finally, the teachers reported enormous financial stressors. That an education professional relied on a food bank while working full-time is unconscionable, and speaks to the already extensively documented (e.g., Whitebook et al., 2014) need for higher wages.

Strengths and Limitations

This study has several strengths. First, its sample is Head Start teachers, which are a critical component of the ECEC field in the United States. While there are many studies on the Head Start program, relatively few concern the voices of those actively teaching. Moreover, as the only federally funded and regulated program, Head Start wields large influence in ECEC practice and policy across the United States. The timing of data collection is also a strength, as we interviewed teachers as they were finishing a semester with an abrupt transition to online, conducting summer school, and wondering what a return would look like in the fall. As qualitative data often entail more temporally distant recall or speculation, the “freshness” of the data constitutes a strength. In addition, our 100% teacher sample means all suggestions for improvement come from those working directly with families on the “front lines” of the pandemic. Moreover, implications regarding culture-building and morale-boosting interventions are relevant for crisis situations, but also for the ECEC field broadly.

This study also had several limitations. First, we conducted interviews only once, and they were fairly brief. Thus, our data are limited in depth and in terms of capturing teachers’ experience during the pandemic, which is now in its third year. Second, although we represented multiple centers, our sample was limited to one city, meaning the experiences described here may reflect a particular context. Finally, it is possible that our data reflect social desirability bias and that teachers “held back” criticisms or withheld information that could reflect negatively. We attempted to address social desirability bias by adopting a nonjudgmental but empathetic affect during interviews and by allowing respondents to “roam”, describing their experiences in detail. We also had strong protocols concerning confidentiality, which we believe mitigated this weakness.

Future Research

First, this study points to the need for more work foregrounding the voices of teachers. While the COVID-19 pandemic did introduce new challenges, it also augmented existing ones. Our study shows that many teachers feel unappreciated or even outright disrespected by their supervisors. In a context with low pay, high demands, and high stress, workplace climate is paramount to well-being. Our study also points to how low-cost techniques, like a simple call to see how someone is doing, can be very meaningful to teachers and boost morale. Therefore, more qualitative work that incorporates teacher perspectives could add to these findings and inform doable interventions. In addition, future work should explore the role of supervisors in ECEC settings. Relatively little is known about their day-to-day expectations, pressures, and their perspective on management, workplace relationships, and culture. Such work could further inform interventions that improve the workplace. Finally, future work should explore how online learning can occur in ECEC settings. Though there is hope that a school-closing global pandemic is a one-time occurrence, there is no guarantee, and deep understanding regarding young children and online learning will be useful for the field. Understanding how young children respond to online learning and creating developmentally appropriate tools may be able to support parents and teachers in supporting their children's learning before, during, and after a crisis such as the COVID-19 pandemic.

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Chapter 19

Hands-On Mathematics: Preservice Teachers Supporting Home Learning During COVID-19



Evan Throop Robinson , Lori McKee, and Anne Murray-Orr

The best lessons are supported with common household items used in both conventional and unconventional ways. My lesson used shoes. . .to measure the capacity of each shoe relative to the students' foot. Students would gather various shoes from around the house of varying sizes, take them outside, put one on and kick their foot as hard as they can to see if the shoe comes off.

This excerpt is from preservice teacher Donna's reflections on a hands-on mathematics activity she designed for kindergarten students. With the support of their families, students were given the assignment during the emergency closure of schools in Spring, 2020. Donna, along with other college students enrolled in their practicum, engaged in lesson planning and reflection for at-home learning as part of their preparation to become certified teachers. As the university faculty reviewed the college students' work, a common theme emerged: the activities they designed for young children emphasized hands-on activities that invited family members to support children's understanding of mathematical concepts in everyday contexts. In this chapter, we examine future teachers' pedagogical plans and reflections on their experiences with teaching in ways that included young children, families, and materials in hands-on mathematics activities.

Literature Review

Mathematics manipulatives are the physical objects and concrete materials that children use to make sense of abstract mathematical concepts (Moyer, 2001). Examples of school-based manipulatives include blocks, counters, Cuisenaire

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rods, and Unifix cubes. Manipulatives (from the French *manipule*, literally “to fill a hand” or “handful”) are tangible—they provide opportunities for students to touch, move about, rearrange, or stack (Sarama & Clements, 2004). These items afford tactile opportunities for children to hold and see quantity and shape as they make sense of mathematical ideas, so they are commonly associated with hands-on mathematics. Early childhood educators use an array of everyday materials, often drawn from the child’s home and natural environment, as manipulatives for counting, sorting, and seriating (e.g., straws, buttons, beans, pebbles, marbles, beads, and string) (Copley, 2010). Some definitions of manipulatives also include children’s bodies and the use of finger play, body movement, and kinesthetic activity in early childhood mathematics (Kamii, 2000; Newman, 2016; Stegemann & Grünke, 2014). Additionally, digital versions of concrete manipulatives create virtual experiences for children to construct abstract mathematical concepts explicitly and to represent their thinking visually (Moyer et al., 2002). We refer to manipulatives as those objects (including fingers) that children grasp, touch, and feel to further mathematical thinking about quantity, shape, and space. We review literature related to the use of manipulatives as hands-on materials for young children learning mathematics with a focus on three areas: the pedagogical support for using concrete objects to promote mathematical thinking, the role of playful and embodied learning, and invitations to families to participate with their children in mathematical activity.

Pedagogy and the Use of Manipulatives

The benefits of using manipulatives in schools to support students’ mathematical understanding are well-documented (Clements & Sarama, 2015; Marshall & Swan, 2008; Swan & Marshall, 2010; Uribe-Flórez & Wilkins, 2017). Pedagogies supporting manipulative use figured prominently in an assessment of early mathematics education in Ontario by Canadian researchers Youmans et al. (2018). This research team concluded that, when teachers felt more comfortable teaching mathematics with hands-on materials, they also recognized the benefits for students and incorporated manipulatives more frequently in their instruction. The teachers viewed this pedagogical choice as beneficial for students because it furthered young children’s conceptual understandings, promoted more positive attitudes toward mathematics, and increased the disposition to engage in mathematical reasoning.

Björklund (2013) explains the pedagogical value of math manipulatives as follows:

...no objects are pedagogical in themselves. Objects rather become pedagogical if someone uses them in a way that directs attention to some aspects of a phenomenon. ... it is important to be aware of the intended object of learning and then which manipulative objects would be suitable for that particular learning object. (p. 482)

Ball (1992) and Moyer (2001) suggested that students merely handling objects does not translate into learning. Ball's words resonate with our focus on children's construction of knowledge: it combines a 'hands-on' methodology with a 'minds-on' approach.

Although kinesthetic experience can enhance perception and thinking, understanding does not travel through the fingertips and up the arm. . . . Although concrete materials can offer students contexts and tools for making sense of the content, mathematical ideas really do not reside in cardboard and plastic materials. (p. 47)

The transformation of concrete representations into mathematical ideas for children requires the teacher's thoughtful consideration of students' needs and abilities as well as how the materials will be used in the hands of children (Rosen & Hoffman, 2009). It is incumbent on future teachers to consider the impact of their choices in selecting appropriate materials and planning how they will be integrated in their lessons to benefit the construction of children's mathematical knowledge.

Curriculum Contexts

North American curriculum contexts recognize the importance of including mathematics manipulatives in early childhood classrooms. For example, the National Council of Teachers of Mathematics (NCTM) Principles to Actions (2014) calls for teachers to incorporate tools and physical manipulatives in their classrooms. The National Association for the Education of Young Children (NAEYC) (2002) advocates that educators carefully choose materials and manipulatives related to the purpose of math play to help students connect their concrete representations with abstract mathematical concepts. In Eastern Canada, students enrolled in teacher preparation programs for young children learn to plan and implement lessons in accordance with a provincial curriculum that favors this view of manipulatives. For example, kindergarten through second-grade teachers first "model story problems with manipulatives or pictures" and children then "create patterns using manipulatives, diagrams, sounds, or actions" (Nova Scotia Education, 2019, p. 4) to problem solve.

Playful Learning Opportunities in School

Play, defined purposefully for early childhood mathematics educators, includes activities for young children that are "fun, voluntary, flexible, involve active engagement, have no extrinsic goals, involve active engagement of the child, and often have an element of make-believe" (Weisberg et al., 2013, p. 105). Ginsburg (2006) underscored the significance of mathematics in young children's play with number, shape, and pattern. Sarama and Clements (2009) described how children develop

different forms of play from sensorimotor or manipulative play in the preschool years to symbolic-constructive play and symbolic-dramatic play in the first years of school. Such forms of play afford children the opportunity to experience the world through touch and exploration of materials, to make connections among mathematical concepts (e.g., counting and measurement), and to act out mathematical contexts (e.g., clapping patterns, finger counting, playing ‘store’). In many countries, early education programs support student-centered, playful learning for young children. Reggio Emilia approaches, for example, espouse constructivist learning theories and acknowledge children as active participants and constructors of their own learning (Edwards, 2002). Reggio Emilia teachers promote strong communication skills in children by engaging students in a variety of expressive modes including words, movement, drawings, paintings, buildings, and sculptures. Project-based units create a hands-on, exploratory space where teachers encourage children to use a variety of materials (e.g., recycled and second-hand materials) to express their understanding (Linder et al., 2011); moreover, teachers provide meaningful collaborative activities involving community and family that nurture interrelationships as a cornerstone of learning. Similarly, the Montessori approach values hands-on mathematics learning; however, the manipulatives are commercially prepared and designate the use of specific materials (Laski et al., 2015) that are more didactic in nature with less open-ended possibilities.

“Playing” with Manipulatives

A growing body of literature shows teachers’ effective uses of manipulatives together with the intention to develop number fluency through hands-on, playful learning help to develop conceptual understanding in young children. Moyer (2001) described early efforts by teachers to provide students opportunities to play with manipulatives. Her research encountered an unfortunate distinction that children made between ‘fun math’ (while using manipulatives) and ‘real math’ (found, for example, in the textbook). She encouraged teachers to use manipulatives more intentionally as part of their instructional strategy to avoid this dichotomy.

Vogt et al. (2018) analyzed learning outcomes in early childhood mathematics by measuring children’s mathematical competencies across three different groups: (1) a play-based intervention, (2) a training program based on direct instruction in skills, and (3) a control group. They determined significant benefit for learners when teachers promoted a “play-based approach” (p. 590) as fun and “less school-like [and facilitated] guided play” (p. 598); this approach had the added benefit of evoking positive emotions toward mathematics among children. Similarly, Lee and Ginsburg (2009) reported misconceptions about learning and teaching mathematics for young children. They noted that, while opportunities to play with a rich variety of mathematical objects showed promise, adult guidance was necessary to ensure students advanced in their thinking and understanding of concepts.

Embodied Learning of Mathematical Concepts

Along with playful learning, there is growing support for embodied learning through activities such as finger play, using the fingers as supports for counting, and whole-body movement in children's mathematical reasoning whereby the child's body is transformed into the manipulative for counting purposes or to represent a quantity in a variety of ways (Hynes-Berry & Grandau, 2019). For example, to illustrate the concept of sets and subsets, a group of children could be arranged by eye color or height. Kamii (2000) observed that "kindergartens and first graders use their fingers much more than counters. Fingers are symbols used in the service of thinking" (p. 29). Within a pretest control group design of lower elementary students learning finger counting techniques, Stegemann and Grünke (2014) described children's finger play and digital representation as "embodied cognition" (p. 194). Their findings suggest that instruction in finger counting techniques supports students' sense-making of abstract concepts and internalization of quantity in ways that other manipulatives do not. Ollivier et al. (2019) promoted finger play as an alternative activity to using other manipulatives and suggested that finger movement contributes to an embodied cognition of number sense, which could represent an advantage for some children struggling to derive abstract concepts from manipulating concrete objects alone.

Family Engagement

A gap in the literature exists regarding manipulative use outside of the school setting. Given the circumstances for teachers and students brought about by school closures, we investigated how schools traditionally have invited families to engage with mathematics, and in particular use manipulatives, to support the school's curricular objectives with children at home. Some research evidence shows that inviting families to engage in mathematical activities in the home may support children's mathematical knowledge, increase their mathematical skills, and build their confidence (Eason et al., 2020; Skwarchuk et al., 2014). Some families may express concern that they are not "good in math" or incapable of helping their child. The hands-on approach to mathematics may help to break down that barrier if, for example, the task is to sort clean and folded laundry and distribute it to the appropriate family member. Through such interactive activities or games and puzzles, family members and children build math skills and their comfort with mathematics together.

Research suggests the importance of recognizing the contexts of children's mathematical practices, inside and outside of school. Goldman and Booker (2009)'s work furthered this understanding and acknowledged the value of building a bridge between the school and the home. Civil and Bernier (2006) explored the challenges of parental participation in children's mathematics. Their model for

parental involvement challenged notions of parents as classroom helpers and acknowledged the complexity of multiple roles for family members at home including parent, learner, facilitator, and leader. Their insights broadened previous conceptions of parents' positioning in supporting children's mathematics education (Civil 2001) to include more explicit home and school connections and recognition of parents' expertise in the practical application of mathematics.

The literature we reviewed highlights the importance of including manipulatives in early childhood mathematics, playful, embodied learning, and engaging families in meaningful ways to support young children in constructing mathematical understandings. In the next sections, we lay out the theoretical framework for our research.

Theoretical Framework

We draw on theories of constructivism to understand the ways that preservice teachers included manipulatives (created from objects in the home) to support young children's hands-on exploration and discovery of mathematical concepts. Like many others in the field of mathematics education, we highlight constructivist principles. This perspective regards knowledge as something that learners actively construct rather than passively receive; furthermore, "coming to know" is a highly individual process in learners and the ways in which they experience their worlds (Kilpatrick, 1987; Steffe & Gale, 1995; von Glasersfeld, 2002). Interconnected with this is the context, defined as the physical and social environments where learning takes place. For example, Davis et al. (1990) explain:

...learners have to construct their own knowledge—individually and collectively. Each learner has a tool kit of conceptions and skills with which he or she must construct knowledge to solve problems presented by the environment. The role of the community—other learners and teacher—is to provide the setting, pose the challenges, and offer support that will encourage mathematical construction. (p. 3)

Cobb (1994) reiterated the "active nature of the children's constructions" (p. 29) from an early age as they attempt to build knowledge through social interactions with parents or siblings.

Congruent with constructivist understandings, we consider the ways that mathematics manipulatives support young children in building their mathematical understandings. Our work is informed by Piaget's (1965) recognition that concrete objects could support children in understanding abstract mathematical concepts and Bruner's (1960) understanding that the child's intuition to play with concrete materials would lead to concept awareness, "an internalized set of structures for representing the world" (p. 332) even before names or language were ascribed to them. We build on the work of Dienes (1967) and Kieren (1971) who suggested that teachers use a variety of materials, including the children's own bodies, to develop mathematical concepts through multiple concrete and pictorial representations and to support children's mathematical understanding. We recognize the work of Noddings

(1990) who identified the teacher's responsibility to provide purpose, context, and support for children's handling of concrete materials and consolidate their emerging understandings about mathematics.

Although constructivist scholars have traditionally focused on young children's uses of manipulatives to construct mathematics understandings in schools (Carbonneau et al., 2013), we extend these theories to consider the implications of these theories for the intended creation and use of mathematics manipulatives to support at-home learning during the emergency closure of schools. We consider ways that preservice teachers planned for students to construct their understandings in mathematics (at times literally "constructing" their own manipulatives as well) within the context of the home environment where different materials and human resources were available to them.

Context and Methodology of Study

The study took place within a two-year post-degree BEd program in a small university in eastern Canada. When schools closed in Spring 2020, preservice teachers in education could not participate in their scheduled practicum. Instead, the college students engaged in an alternative practicum that included the following.

- Task 1: Designing a series of lesson plans, minimum 10, for in-school instruction (for prepandemic conditions in the grade they had been assigned for practicum)
- Task 2: Redesigning the lessons to support learning at home
- Task 3: Reflecting on their rationale for the ways they (re)designed these lessons

The detail and length of these assignments varied according to the college students' year in the program. For example, future teachers in their first year were expected to create more simplified plans than those in the second year to reflect different experience levels in coursework and school-based practice.

This study focused on the assignments completed by future teachers of young children during this alternative practicum. Participants included 26 students who were recruited after they had completed their coursework and practicum assignments, and grades had been submitted. We obtained university research ethics board approval prior to recruitment. In accordance with ethical guidelines for the treatment of human participants, we sent an Invitation to Participate letter to all Year 1 and Year 2 students outlining the research and explaining the project's voluntary and confidential intent. As they were no longer in courses with the researchers, students were assured that their grades would not be affected by nonparticipation. We informed participants that information from their assignments—including images of planning materials and excerpts from writing—might be used in scholarly publications and conferences and that their names would be changed with any identifying information removed. Once we received replies, we forwarded Consent Forms to the 26 volunteers and had them sign and return those forms indicating their willingness to participate in the study and giving their permission for excerpts from their

Table 19.1 Preservice teacher participants

Case: Year 1		Case: Year 2	
Pseudonym	Grade	Pseudonym	Grade
Angie	Kindergarten	Susan	Kindergarten
Donna	Kindergarten	Rayna	Kindergarten
Carol	Kindergarten/1	Marie	1/2
Karla	Grade 1/2	Claire	2
Molly	Grade 2		
Nancy	Grade 2		

assignments to be quoted. From that group, ten preservice teachers were studied: six were in their first year while four were in their second year of the university teacher preparation program (see Table 19.1).

We employed qualitative multiple case study methodology (Yin, 2014) for its affordances in responding to research questions that ask how or why, in situations where researchers do not have control over events, and where the boundaries between context and phenomenon are blurred. This multiple case comprises two cases, with each case bound by the assignment work of the alternative practicum for Year 1 and Year 2 preservice teachers. The case study was fitting as we aimed to identify how teacher candidates responded to the practicum assignment tasks, in which the pandemic context was inseparable from the participants' work. Data sources included the college students' lesson planning materials (i.e., written plans, images, web-based materials, and digital resources), as well as their written reflections compiled throughout the five-week practicum placement during the winter 2020 semester. All participants submitted a total of 10 lesson plans. In total, 697 lesson plan pages that included 203 images were received, averaging 69 pages per participant. The participants also revised their plans for at-home learning and submitted 64 pages of written reflections on the process which took place over the five weeks of this alternative practicum.

Data Analysis

Data were categorized by grade level and according to the subject matter of the lesson plans (e.g., Language Arts, Mathematics, Science, and Social Studies). Data analysis was inductive (Merriam & Tisdell, 2016), initially using an open coding process whereby each researcher read through the data and noted "segments of data that might be useful" (p. 204). Individual researchers moved to axial coding next, beginning to group open codes and form potential categories of recurring patterns (Charmaz, 2014). The researchers then shared the possible categories they had each identified with one another, looking for areas of resonance and dissonance, and recognizing innovative ways in which college students used materials as they

planned mathematics activities for early elementary children. Through multiple discussions among researchers, themes began to emerge: connections to course material; lesson design shifts from the initial lesson plan to the version revised for learning at home; technology as the deliverer of content and communication tool; student-centered and play-based approaches; positioning of teacher, student, parents/guardians, and curriculum, as well as pandemic-related challenges and opportunities. The teacher reflections offered insight into how college students in the alternative practicum perceived their roles as lesson planners during the school closures. The varied responses from participants provided context for their alternative practicum planning and helped clarify design choices and strategies as they navigated this unprecedented lockdown experience. Collectively, the researchers categorized the themes, grouping some subthemes together to construct propositions for this multiple case (Baxter & Jack, 2008). Returning to our propositions through an iterative process (Yin, 2014) lead to a focused analysis and increased our confidence in the findings that show how preservice teachers planned playful mathematics lessons using hands-on materials from the students' home and outdoor environment and invited family members to play mathematics games with their children.

Findings

Our findings describe the ways preservice teachers included materials for hands-on mathematical experiences in the activities they designed for young children (K-2) during the emergency closure of schools. The data suggest that all the practicum students in Year 1 and Year 2 endeavored to design hands-on mathematics learning activities for their students but were challenged to know what materials were available in each home, and how families might use these materials. College students responded to this dilemma by designing activities that ranged from objects that closely resembled school-based materials such as printable copies of commercially produced mathematics materials to household materials they reasoned would be available in the home. In the absence of school-based materials, preservice teachers also included activities that allowed children to embody mathematical concepts through finger play and movement. These future teachers invited parents and children to construct or adapt available materials in a variety of ways to support hands-on mathematics learning.

Our findings begin with evidence of the future teachers' concerns about the learning materials available in homes, followed by descriptions of the ways they invited parents and children to create and use mathematics manipulatives in the home through their activity designs. Embedded within the examples are the university students' beliefs about student-centered learning which included a deep concern for the wellness of children and their families alongside encouragement to use manipulatives to promote playful explorations of mathematical concepts.

Theme One: Identifying Available Resources

The preservice teachers all recognized challenges in identifying resources that would be available in all of their student's homes. For example, Susan reflected, "our students are all in different households, experiencing different levels of care, and have different access to resources." The preservice teachers were particularly concerned about their students' access to technology in this largely rural district. Carol reflected, "it is highly unrealistic to imagine that all students and families in . . . [this region] would have access to the Internet or to computers within their own homes." The concern about access to technologies shaped the lesson plans. In her letter to parents, Donna explained, "Due to the age of your children and the lack of universally available technology, I have designed activities that can be completed with household items."

Intermingled with concern over access to technologies were the preservice teachers' philosophies, particularly their beliefs about active, playful learning for young children. They reflected upon the strain on parents in supporting children's learning with technologies at home during the pandemic. For example, Rayna explained that children:

should be discovering new learning through play-based learning and exploring their environment. . . . Parents are most likely using screen time a lot more than usual, as they struggle to get their own work done or keep children occupied. I did not want to add to this time by creating lessons that would be . . . on-line.

Other practicum students agreed and designed "low-tech" activities. The data show instances where technology is included in activity designs (e.g., documenting learning, viewing instructional videos, practicing mathematics skills on digitized worksheets), but there are no examples of using digital technologies as mathematics manipulatives. Though the lack of technological resources may have constrained some activity plans, Molly reflected, "searching for alternative resources allowed me to explore different methods of teaching." We next identify the uses of materials in the context of the activities the college students designed for the alternative practicum assignments.

Theme Two: Replicating School-Based Manipulatives

Future teachers in the program provided opportunities for young children to construct mathematics manipulatives at home to replace the commercially prepared manipulatives available in the classroom using materials that could be shared through email. For example, Claire's "at-home learning pack," included large colorful images that could be printed from home computers as substitutes for the base ten blocks the Grade 2 children had previously used in her classroom. As her classmates had done, Claire included an invitation to families to "work together" with the materials to build their place value understanding and to "talk through the

strategy as you go along, ensuring [students] understand the exchange process.. When children understood the regrouping process, Claire introduced parents and children to a playful activity, “Take turns rolling the dice ... After 5 rolls, the player with the highest number correctly displayed on their place value chart wins.” As Claire reflected on the activities she designed, she explained, “I pictured [my students] in the classroom... and knew they would have more fun and be more successful with the hands-on aspect of the math unit.”

Other alternative practicum students invited parents and children to create manipulatives at home that also replicated commercially prepared manipulatives in their classrooms. Angie, Karla, and Nancy invited parents and children to build a balance out of paper or plastic cups, string, scissors, and coat hanger and compare the masses of small toys and household materials, something they had experienced in their mathematics methods course. Figure 19.1 shows the image of a completed balance that Angie provided with her activity plans.

Angie explained the ways the balance could be used to help young children compare the mass of objects:

Hang the coat hanger on a doorknob and place a variety of items into the cups to compare their weight. The cup that hangs lower is heavier, and the other cup is lighter. If neither of the cups is higher or lower, the items weigh almost the same. While doing this, ask:

- “What are you comparing?”
- “Which is heavier?”
- “Which is lighter?”
- “How do you know?”



Fig. 19.1 Angie’s balance constructed from household materials

Encourage your child to play with the balance and explore lots of different objects and weights.

Nancy envisioned that the use of the balance would help consolidate understandings in mathematics, saying “I think that students would be able to understand the concept of mass in a way that is visual by making their own balance.” We note the intention of these preservice teachers to support children’s learning through plans which replicate school-based manipulatives for use at home.

Theme Three: Using Household Materials as Manipulatives

The college students designed mathematics activities that could be used with any materials available in the home and outdoor environment. Donna reflected

Materials from home can be used for anything you need, with a little imagination. Every lesson that I created ... used objects that could easily be found around the house or yard. . . . Learning . . . shouldn’t be a financial burden on families. . . I strongly recommend using what you have.

Others shared this sentiment and designed mathematics experiences that featured household materials that were hands-on to varying degrees. We identify examples involving searching and gathering in support of number sense and geometry followed by examples of manipulating household materials for measurement activities.

Some suggested searching for objects in the home to support learning about different mathematical concepts. For example, Angie invited children and families to hunt for objects in the home and yard and count them, “Find and count 20 blue things in your bedroom, count and collect 20 pieces of litter outside.” Karla invited her students to participate in a “Shape Hunt” where she encouraged her students to explore their environment with a mathematical lens:

- Go on a shape hunt in and around your house. Snap pictures or write/draw your findings!
- Find 5 things that are square.
- Find 3 things with a triangular face.
- Find 3 round or circular objects.

Although these examples do not involve the handling of materials, they include household objects to support mathematical understanding through visualizing and dialogue between family members.

Carol identified learning goals that called for a hands-on approach to measurement such as, “I can begin to use direct comparison between two objects to compare and measure length, mass, volume, and capacity.” She adopted the idea of hunting for materials in an activity she called “What is in my room? Measurement Scavenger Hunt” and, in her letter to parents, explained, “Students will be encouraged to use everyday household objects, including their own toys and sports equipment to

perform a wide range of different measurements and comparisons.” Carol invited parents to “Provide examples to your child about how you use measurement in your everyday life (cooking, baking, doing laundry, doing the dishes, etc.)” and discuss measurement terms (e.g., bigger/smaller, taller/shorter heavier/lighter). Then, she asked parents and children to search “in student’s rooms” to “find something that is longer than a caterpillar. . . . find something that is wider than a dime” and, working together, to record their answers in the booklet she provided.

Nancy and Karla each invited children and parents to work together to use household materials to measure family members. For example, Nancy invited children to take the lead and identify the non-standard unit of measurement (e.g., paper clip, pencil) that was most fitting for measuring household objects or family members. In her “Measure Me!” activity, Nancy explained to her students:

You will need the help of someone else in your family, it can be mom, dad, brother, sister, nanny, papa or anyone else. You will need 2 non-standard measuring tools. . . make your best guess at how many . . . it will take to measure the length of your family member. After you wrote down your best guess, you will start measuring! ...Tell your parent or guardian why you think that one [of the measurement tools] is better. Send pictures. . .to show what you have learned!”

Karla also invited her students to measure family members:

Build something that is as tall as you or someone in your family. Take a picture of the person standing next to the thing you have built. If possible, use the same type of object to build the structure (how many pillows or blocks, etc. high is your older sibling?)

In the three measuring activities above, college students’ plans invite the playful use of household objects alongside family members.

Theme Four: Innovating Activity Design

Other preservice teachers found ways to repurpose household materials to support hands-on learning about the early measurement concept of comparing. For example, Donna designed activities that encapsulated her belief that “Learning shouldn’t be restricted to the kitchen table with worksheets and a pencil”; these activities invited active exploration of mathematics concepts using common household articles. In her lesson, “Is it Just Right,” children were invited to compare the size of objects using relative language “(bigger, smaller, or almost the same)” and explore cause and effect by doing a “shoe kick” in the yard. In her activity plan, she explained:

Have [children] put on a shoe that fits them now. . . have them kick their foot into the air to see if the shoe will come off. Have them try a shoe that is too small and kick, repeat with a shoe that is too large and any other shoes you have gathered.

Donna suggested that as parents help the children put on the footwear, they use comparison language such as bigger and smaller. Following the shoe kick, Donna coached parents to “ask why the shoes that were too small and too big came off.” In her reflection, Donna explained the value of the shoe-kicking activity, “The

possibilities for exploration are endless and the best part is that no one had to run to the store to make it happen.”

Donna compared her shoe activity to her own experiences in school:

As a child I remember being in the gym with my shoes untied, trying to kick them as far or as high as I could. It wasn't safe and it never lasted long because a teacher was soon [there] to shut it down. I would have loved to go home and see that my parents/guardians were encouraging me to do exactly what I wasn't allowed to at school.

While Donna does not directly explain that this memory led to the shoe-kicking activity in her lesson plan, she appears to have been inspired by this event from her childhood. Donna's activity design and learning materials were distinctly different from what she believed could happen in the school, and her intention to include common household items like shoes in her lessons seems to arise from a desire to push the boundaries of what might be considered a manipulative.

While preservice teachers aimed to design activity plans that used household materials to support hands-on learning, some questioned what materials the children could access in the home. As Rayna reflected:

One of my goals...was to use materials all families may have in their home. I kept questioning myself about if the materials were truly common. For example, at one point I was going to use buttons as a manipulative and realized not every household has buttons. Similarly, there was an activity where several balls were needed. Again, I needed to change my thinking. Not every family has five balls hanging around, what can be used as a ball every family has? Socks!

Rayna's shift in thinking prompted her to reimagine mathematics activities for the home using repurposed home materials. For example, in her “Making Waves” activity designed to support children in representing and describing numbers in two parts “concretely and pictorially,” Rayna invited parents and children into a playful activity using a bed sheet like ocean waves and rolled sock balls as boats, “our sheet is one wave of the ocean. Please help me spread out our sheet and put on our sock balls. The sock balls are going to have a little ride!” With this prompt, children and parents could shake the bed sheet at different speeds, with some “boats” falling off the waves. To support mathematics understandings, Rayna invited parents to ask, “How many sock balls are still on the top part of our ocean? (sheet) How many sock balls are on the bottom part of our ocean? (floor) How many sock balls are in the whole ocean? (altogether).”

Rayna designed other easy-to-understand and engaging activities that were meant to be played often. Continuing to model numbers in two parts, Rayna introduced the “Stuffed Animal Shuffle” activity to model different parts of the whole:

Today our stuffed animals/toys are going to dance! When I start the music, you get to dance some animals/toys to a part of the room. I am going to dance some to another part of the room. Then we will stop the music and see where our animals ended up.

Rayna then introduced “thinking out loud” strategies for parents to use to focus children on the mathematical concepts, “How many animals danced to this PART of the dance floor (couch)? How many animals danced to this PART of the dance floor (toy box)? How many animals are dancing all together? (this should be the total).”

These activities are examples within a suite of other playful, hands-on learning activities that preservice teachers reimagined using household materials as mathematics manipulatives. At the end of each activity, Rayna underscored the importance of playful learning together saying, “HAVE FUN!!! Children learn best when they are playing!”

Theme Five: Embodying Cognition

Several alternative practicum students designed hands-on mathematics activities that featured the body as a means for constructing mathematical understandings. For example, Karla created a sequence of three patterning activities that focused on movement and action. The first required no material objects and asked children to demonstrate a repeating pattern like, “Stomp, Clap, Snap, Jumping Jack” for family members. Following this demonstration, the activity plan suggested that students remove or add action and ask family members to identify the changes. The next phases of the activities introduced a few materials to showcase the children’s movement. In the second activity, children were invited to add music to movement and create a dance pattern they could perform and/or teach to family members. To further extend the patterning activity, Karla’s plan invited children to “make your own musical code” using the following steps:

- Draw a pattern using shapes ([e.g.]: Square, Square, Circle, Square, Triangle).
- Give each shape a sound ([e.g.]: Square = Clap, Circle = stomp).
- Practice performing your sound pattern code.
- Teach it to a family member and perform it together.

Karla reflected on her choice to include active movement in math over pencil and paper materials saying, “Learning about patterns through dance, shapes. . . is more engaging and interactive than repetitive drills,” evidence of her playful, kinesthetic approach to lesson planning.

Angie also included playful activities that focused on showing mathematics concepts on fingers and bodies and invited parents and children to respond to learning outcomes related to number sense and counting. For example, Angie created an activity for parents and children around the poem “Five Little Bunnies.” In this activity, she suggested a fingerplay strategy to parents:

Read the poem “Five Little Bunnies” with your child. Talk about the numbers that are in the poem and how many fingers we have on our hands. Show your child how you would hold up fingers as you say the numbers in the poem. Ask them to join you and have your child hold up their fingers with the poem on their own.

Angie suggested that parents extend this counting activity by playing a finger counting game she invented:

- Play a game where you hold up fingers and ask how many you are holding up. Ask:

- “How many fingers am I holding up on each hand?”
 - “How many fingers am I holding up in total?”
- In an additional counting activity, Angie suggested a more kinesthetic approach:
- You can ask your child to count to 20 while taking steps, climbing stairs, clapping, hopping, etc.

Angie’s activity plans support playful learning by including fingerplays and whole-body movement. In her reflection, she noted that when we “change their learning environment and the way lessons are presented, . . . [students] are more likely to learn through play and recognize the daily activities they partake in can also be educational.”

The findings offer insights into how future teachers of young children designed activities that promoted hands-on learning with home-based materials. These activities were open and flexible, inviting opportunities for parent–child collaboration, and some represented a reimagining of uses of household materials to support young learners’ knowledge construction in mathematics using the physical resources available.

Discussion

In this chapter, we considered the ways that preservice teachers enrolled in an alternative practicum experience included opportunities for families to participate in hands-on mathematics activities during the emergency closure of schools. Our exploration was guided by notions of constructivism that identify the importance of young children’s active and purposeful manipulation of objects supported through conversation to build mathematical understandings (Cobb, 1994; Noddings, 1990). The results of the study illustrate that these college students planned to support hands-on mathematics learning in the home through various choices of materials, ranging from more to less conventional, and how these choices shaped activities in the evolving context of the pandemic, as well as how these material choices and activities positioned parents and families. In this section, we trace the ways the preservice teachers designed and reflected upon their activity plans with a focus on each of these elements.

Material Choices Led to Design of Activities to Support Hands-on Mathematics Learning

All the participants included opportunities for their young students to use concrete materials in the mathematics activities they designed for their young students. This inclusion was consistent with the learning outcomes in the mathematics curriculum

documents for this region that promote the use of concrete materials (NS, 2019) as well as constructivist theories that recognize the importance of manipulating physical objects to construct mathematical understandings (Moyer, 2001). As schooling shifted to the home during the pandemic, the college students could not rely on the commercially produced mathematics manipulatives they used in the classroom and instead considered what materials available in the home and natural environment could serve as mathematics manipulatives (Copley, 2010).

The ten participants included a variety of materials as manipulatives (Hynes-Berry & Grandau, 2019; Kamii, 2000) in their activity plans. Though the literature has long recognized that mathematics manipulatives can include a variety of objects, the choice of materials included in the college students' activity designs showcase the diverse objects that can be used to support mathematics learning. Angie, Karla, and Nancy suggested constructing a balance from materials they thought would be available in homes (e.g., plastic cups, string, and a coat hanger) to support learning about measurement. In other activities, participants repurposed household materials, opening up possibilities for what a manipulative is and can be as well as how it can be used. With children's stuffed animals, toys, objects in bedrooms, litter, and family members becoming "suitable" objects (Björklund, 2013, p. 482), the materials supported children building understandings of number sense and measurement skills in the home context. Other preservice teachers negotiated the challenge of inconsistent access to material objects by including the body as a manipulative (Stegemann & Grünke, 2014). For example, Angie provided activities including finger play and clapping and hopping, and Karla included activities to create a pattern in dance.

Notable in the data was the range of materials chosen for mathematics activities. Some materials were similar to manipulatives used in classrooms, and others were unique to the home environment. Choices of materials led them to design activities that ranged from more "school-like" (Vogt et al. 2018, p. 598) and structured, to more playful and exploratory (Featherstone, 2000; Nicol & Crespo, 2005). Claire's "at-home learning pack" provided paper templates for students that could be printed at home to replicate the base ten blocks used in the classroom for place value lessons and the number line for additional activities. Claire "pictured [her students] in the classroom" and redesigned her activities with base 10 blocks, using a paper format for home use. In contrast, Donna purposefully chose to design activities that were markedly different from typical classroom mathematics activities and unique to the home context using family members' shoes. In Rayna's activity plans, it is evident that reimagining household materials as something new influenced activity design; bedsheets became ocean waves, and socks became boats all in service of building flexibility with numbers and knowledge of partitioning and counting concepts. Rayna's ocean wave activity is an example of these possibilities for exploration and innovation. Her comment that "one of my goals...was to use materials all families may have in their home" highlighted the purposeful movement away from commercially prepared manipulatives.

The future teachers' focus on identifying available materials to support mathematics learning shaped the activity designs they planned. Reflecting on her activity plans, Donna noted "[t]he possibilities for exploration are endless" when expanding

the range of what may be used as manipulatives. This group of future teachers appeared to envision these materials as means to support their goals for the students to construct mathematical understandings (Moyer, 2001). Aligned with the guidance in the literature, the preservice teachers recognized that “no objects are pedagogical in themselves” (Björklund, 2013, p. 482) and that “mathematical ideas really do not reside in cardboard and plastic materials” (Ball, 1992, p. 47). Their plans included activities where the children had opportunities to touch and experiment with objects as they explored mathematics concepts. Reinforcing Ball’s (1992) idea that mathematical understanding “does not travel through the fingertips and up the arm” (p. 47), these data illustrate preservice teachers’ understanding and application of activity design that invited the children to use the materials playfully and in the context of others, consolidating mathematical understandings and supporting meaning-making together. Since these future teachers could not be physically present during the mathematics activities described in their lessons, they planned for parents and family members to embrace new roles including the facilitator, leader, and learner (Civil & Bernier, 2006) as they worked together on activities that were different from a traditional homework routine. We discuss next the attempts by preservice teachers to build a partnership with families through modified lesson plans for at-home learning.

Partnering with Families

The constructivist theory argues that learners construct their understandings in relation to the ways they experience the world (Kilpatrick, 1987; Steffe & Gale, 1995; von Glasersfeld, 2002) and to the people within the learning environment (Davis et al., 1990). The literature has long affirmed that children learn in the social context of their families (Cobb, 1994) as “respected partners” (NAEYC, 2002, p. 12). In classrooms, the community that supports learners includes a class of children along with their teachers, while during the emergency closure of schools, the learning community included parents as allies in offering the support young children needed to construct mathematical understandings (Davis et al., 1990). Our research suggests that in their activity plans, preservice teachers recognized the challenges facing parents and planned to partner with families in new ways to support hands-on mathematics learning. Donna noted that “learning. . . shouldn’t be a financial burden on families” and Rayna recognized that “parents. . . struggle to get their own work done or keep children occupied” during the lockdown when most were working from home.

The findings highlight different examples of preservice teachers planning hands-on mathematics activities for young children and the children’s parents/families in the midst of a world health pandemic. In activity designs such as those described in this chapter, the distinction between school mathematics and family mathematics identified by Goldman and Booker (2009) becomes somewhat blurred. For example, Claire invited families to “work together” with materials to build their place value

understanding, implying her belief that parents can support their children's learning of mathematical concepts. Similarly, in her letter to parents, Carol noted that activities like cooking, doing laundry, or washing the dishes could "provide examples to your child about how you use measurement in your everyday life." This suggests Carol understood that mathematics learning that focused on school-based learning outcomes could take place organically in the home. The data show that these future teachers of young children worked to partner with families. At times, it was difficult to balance the need for some families to have explicit instructions with the goal of providing some autonomy for parents. Nancy's "Measure Me" activity and Karla's plans for students to measure family members both included detailed instructions directed toward children, presumably with the knowledge that parents would be the ones reading and enacting these instructions. Others, like Donna and Rayna directed instructions to parents, as in Rayna's invitation to parents to ask children how many socks are in the bedsheet ocean. The college students' invitations to families underscore some awareness of Goldman and Booker's (2009) call to build a bridge between teachers and families. Yet, their desire to provide structure in support of children's learning suggests a tension between the invitation to parents to make choices in enacting the flexible lesson plans and the need to provide explicit guidelines, to maintain some degree of control of the lessons.

Despite such tensions, the ten participants' lessons aligned well with Skwarchuk et al.'s (2014) view of family math engagement, because the college students provided guidance about the design of learning activities but invited family members as partners in the activities. They asked families to make use of objects they may have in their homes to engage playfully with their children and encouraged them to be the decision-makers in choosing relevant materials for concepts such as comparing attributes using non-standard measurements, partitioning numbers, or counting. The lesson plans, revisions to them, and reflections on them are a hopeful example of planning for at-home learning during the pandemic. This group of ten future teachers made some innovative choices of materials as manipulatives, invented activities that engaged children with those materials in meaningful learning opportunities and demonstrated an asset-focused view of families as knowledgeable partners (Pushor, 2015).

Strengths and Limitations

Our findings describe creative responses from future teachers to meet the mathematics learning outcomes for young children while everyone was sequestered in their homes during the COVID-19 pandemic. The level of detail supplied through careful analysis of these ten students' assignments demonstrated that they not only used found materials from the home environment but also involved family members in playful activities. Teachers' resourcefulness in planning, seen throughout our findings, can encourage more play-based approaches and bodily-kinesthetic tasks using manipulatives that are commonly found in homes for hands-on activities. This is an

approach that supports the increased engagement of young children, as previous studies have found (Lee & Ginsburg, 2009; Moyer, 2001; Vogt et al., 2018). Additionally, our findings showed how teachers might employ a variety of communication strategies with parents to invite them as partners to engage in playful games with young children. Strengthening communication between the school and the home to build relationships among those most concerned with young children, their development, and learning may support children's mathematical learning (Eason et al., 2020; Skwarchuk et al., 2014).

We acknowledge several limitations to our study. Undoubtedly, the stress and anxiety brought about by the pandemic and abrupt school closures impacted the lives of the preservice teachers in different ways. Navigating a new and uncharted landscape, preservice teachers reimagined their planning for at-home learning opportunities in mathematics for families with young children. In fulfilling the requirements of the alternative practicum, these college students responded with professionalism and grace while coping with many unknowns within an uncontrollable environment. Further study on the impact of stress in planning during these unprecedented conditions is required.

With the decision to keep all schools closed for the remainder of the school year, the participants did not experience the full implementation of their at-home lesson plans, nor could they gather the assessment data from their students. Future research could involve follow-up study to document how families facilitated the hands-on mathematics activities and how young children responded to the tasks. In the future, we plan to explore the assessment of students' development and progress in at-home mathematics activities using hands-on materials and play-based tasks, as well as parents' responses to at-home learning experiences with their children. This research could illuminate the benefits and challenges families may encounter in making and using concrete materials to show mathematical thinking and adopting a more playful pedagogy in mathematics. Further study that measures the impact of these approaches on families' appreciation of mathematics would be useful in promoting mathematical confidence in young children to support their learning.

Concluding Thoughts

These novice educators found a variety of ways to respond to the context of at-home learning and designed plans to include fostering a space for a teaching and learning relationship among children and family members. This chapter has outlined a reimagining of materials and their multiple uses for learning mathematics, arising from the impetus of school closures during the pandemic. We applaud the ingenuity shown by these teachers at a very early stage in their professional development and acknowledge the unique COVID-19 pandemic in which they found themselves. With uncertainties about who would be at home during these challenging times and what materials or resources might be available, these students made thoughtful choices and worked to provide meaningful learning activities for young children.

Designing appropriate hands-on lessons for both school and the home has the potential to support the development of professional practice, build a bridge between learning at school and in the home, and deepen the relationship between teachers and families.

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Part V
Delivering Programs and Services Despite
Challenges

Chapter 20

Young Children's Online Learning and Teaching: Challenges and Effective Approaches



Evdokia Pittas, Inmaculada Fajardo Bravo, and Nadina Gómez-Merino

Five-year-old Anna sits at the kitchen table in front of her tablet interacting with her teacher and classmates. She feels happy when she sees her teacher and classmates; however, after some time she leaves her seat and runs around the kitchen table, draws a picture for her mom, or sings her favorite school song to her older sister. Anna's sister asks her why she is finding it so difficult to follow her teacher's directions, to take turns or to understand the story her teacher just read aloud. Anna responds that she feels tired when she sits for a long time, that sometimes she doesn't know how to say something or when to say it and that her teacher often speaks too fast.

Recent research findings suggest that teachers (e.g., Atilas et al., 2021) and children (e.g., Dong et al., 2020) face certain challenges with online instruction. The greater the differences between traditional and online teaching, the more likely children and teachers are to encounter teaching and learning difficulties. First, due to limited face-to-face interaction between learners and teachers, the learning process becomes less active, and, on top of that, attention and motivation decline, as observed in Anna's responses, which introduced this chapter. Second, due to difficulties arising from the use of oral and written language in online settings, the acoustic and visual features of teachers' speech processing may become less intelligible, teachers' oral explanations are substituted by texts and videos, and there is extensive use of "on-screen reading." While one could focus on the negative aspects of young children's online learning and teaching, it is also possible to take a positive approach and focus instead on the professional and research-informed approaches

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that teachers can use to enhance their teaching effectiveness. The remainder of this chapter is structured around the main challenges associated with online teaching with young children and ways to address them. Throughout the discussion, we recommend online resources that can support early childhood teachers in meeting each challenge. Teaching practices are described and recommended.

Challenge I: Limited Face-to-Face Interaction Between Young Children and Teachers

A major challenge in online classes is the limited face-to-face interaction between learners and teachers. The learning process is hindered and becomes more sedentary and less engaging for the learners as a result. To make online learning more interactive, we provide teachers with practices that incorporate active learning principles such as Problem/Project-Based Learning and multimodal digital learning activities. A further outcome concerns attention and motivation issues. In such a case, we outline how teachers can coordinate caregivers' efforts to boost engagement and how instructions can become more explicit. The graphic in Fig. 20.1 gives an overview of this first challenge and the suggested practices.

The Learning Process Is Hindered, Becomes More Sedentary and Less Active

In face-to-face classes, young children have the opportunity to engage with the subject matter through hands-on activities in a context where they practice their skills and they discover and communicate new knowledge by asking questions, sharing ideas, or jointly reading and producing texts (Johnson et al., 2019). In this way, young children gain deeper understanding of knowledge as active participants in their learning (Cohrssen et al., 2017). In online classes, hands-on activities are more difficult to incorporate into the remote curriculum, and, as a result, children's sedentary time increases and active learning is inhibited (Dong et al., 2020; Kim, 2020). In order to facilitate active learning in online settings, we need to strengthen the link between discovery and learning in a way that children have more opportunities to be engaged in the learning process and thus understand the world around them (Hsin et al., 2014; Li, 2012).

One way to foster active learning in online classes is through problem-solving practices. The teacher, as facilitator, involves young children in problem-based activities by adopting teaching methods such as Problem/Project-Based Learning (PBL) (Ubben, 2019). During PBL activities in early childhood, young children develop understandings about their learning and themselves. PBL activities extend over a period of time (e.g., several weeks/months) during which children raise

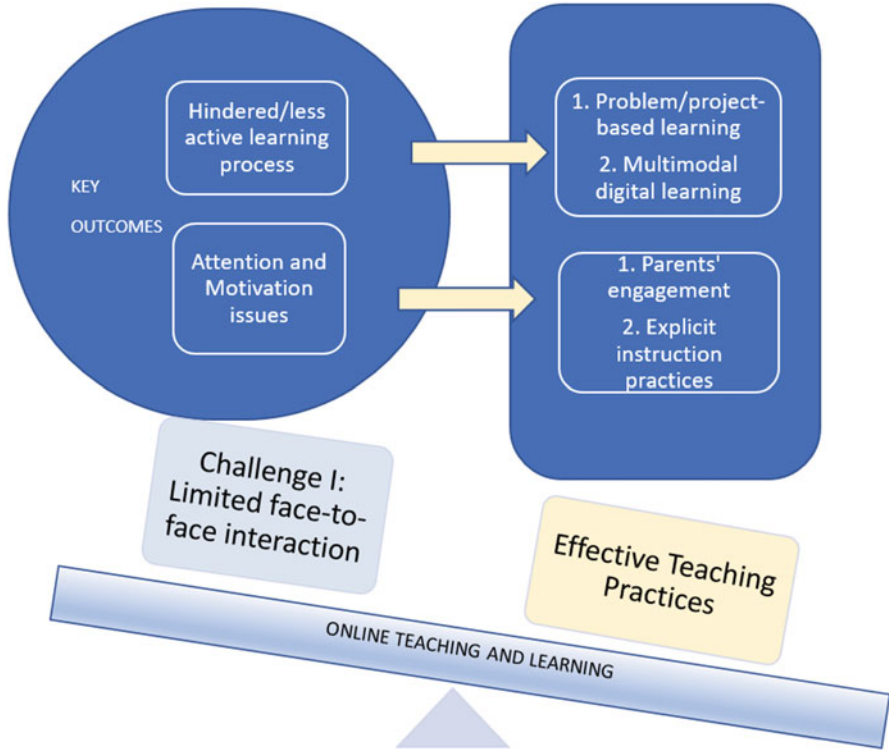


Fig. 20.1 Challenge I and suggested practices

questions, develop thinking skills, and make plans (Joseph & Strain, 2010; Lev et al., 2020). Preschool teachers who practice PBL in their classrooms (Li, 2012) typically manage the process through three broad stages. During Phase 1, the project topic is determined and the specific related questions are formulated through discussions with children based on their experiences and natural curiosity. During Phase 2, in an attempt to answer their own questions, children gather primary data through activities such as field visits or interviews, and/or collect secondary data through resources such as books, photos, newspapers, blogs, and diaries. During Phase 3, teachers have discussions with children about what they have learned regarding the topic under study and children, document what they have learned through drawings. Then, working together, teachers and children design a unit of study for bringing together the children’s findings (Alfonso, 2016).

In online settings, PBL phases can be successfully integrated with the use of videoconferencing platforms such as Microsoft Teams, Zoom, Moodle, Blackboard Collaborate, and Google Meet for effective collaboration and knowledge exchange (see Table 20.1). Additionally, with the use of free online blank wall boards such as Padlet, children can share their ideas and discoveries, plan, and brainstorm in real time, upload photos/pictures or videos, or share maps, etc. For Phase 2, where

Table 20.1 Videoconferencing platforms

Online learning platforms	URL
Microsoft Teams	https://www.microsoft.com/en-ww/microsoft-teams/group-chat-software
Zoom	https://zoom.us/
Moodle	https://moodle.org/
Blackboard Collaborate	https://www.blackboard.com/teaching-learning/collaboration-web-conferencing/blackboard-collaborate
Google Meet	https://apps.google.com/meet/

specific related questions are formulated, teachers can use online Mind Maps such as Popplet to facilitate thinking as well as organize and visualize ideas. For organizing the project and for more efficiently following the three-phase design, teachers can use online project management tools such as Project Pals or Edmodo to create quizzes that support communication with children and caregivers. In online settings, communication with caregivers is of vital importance for the successful implementation of PBL. Finally, for the data collection phase and the project conclusion that summarizes and reflects on children’s findings, teachers can use Microsoft’s Flipgrid, a video-based response platform, for providing feedback. Through online video discussions, children can upload, view, and respond to each other as they gather data. Microsoft’s Flipgrid platform is especially useful during Phase 3 when teachers hold discussions with the children on what they have learned. Young children may find it difficult to recall information and experiences; however, Flipgrid can record video interviews with grandparents, relatives, or other community members to produce a documentary. Another way to gather data is by recording the interview and sharing it through the online platform. Overall, teachers can give the opportunity to children to work together and prepare their project even from a distance, thus, fruitfully integrating PBL into online learning.

The following example illustrates how teachers can incorporate PBL scenarios into the virtual classroom. After the PBL project’s topic is determined (Phase 1) through a videoconferencing platform (e.g., “Let’s discover dinosaurs!”), the teacher develops a thought plan through Popplet, share screen, and poses relevant questions for research (e.g., “How do we know that the dinosaurs existed?”, “Are there other animals similar to dinosaurs nowadays?”, “How do we know what dinosaurs looked like?”). After that, the children use Popplet to share information they have found as well as answer the questions (Phase 2). For instance, children may gather primary data (e.g., carry out interviews with family, friends, or professionals over a recorded video chat or over the phone). The recorded video chats or the phone recordings can then be uploaded onto Microsoft’s Flipgrid for gathering all data in one place. Children can also gather secondary data through books, photos, newspapers, blogs, and diaries (e.g., “Search for pictures of the skeleton of a dinosaur and a chicken and look to see what is alike. How are dinosaurs and chickens similar?”). As the project progresses, the teacher provides opportunities to children to share their understating of the topic and their discoveries by posting or sharing their drawings or

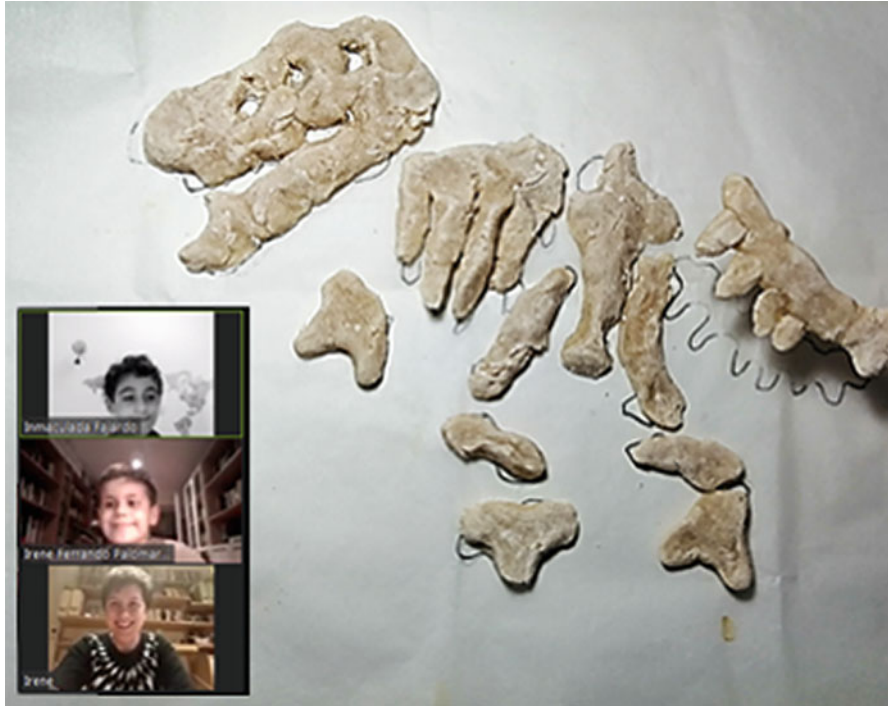


Fig. 20.2 Screen capture of a videoconferencing teacher–student session for PBL Phase 3 “Let’s discover dinosaurs” project. One of the students (age 7) is sharing and discussing a photo of his dinosaur skeleton made with salt dough

art crafts (e.g., “Make your own Dinosaur skeletons or fossils made with salt dough and share it with your peers. Each one has to make a different type of dinosaur: Tyrannosaurus rex, triceratops, etc.), and by uploading photos/pictures through Padlet or videoconferencing platforms (see Fig. 20.2 for an example of Phase 2 of the PBL using a videoconferencing platform).

Another way to foster active learning in online classrooms so that the learning process is enhanced is using multimodal digital learning activities. Multimodal learning refers to a learning experience in which two or more modes of systems are engaged in the learning process. For example, in addition to the text, teachers may enrich the learning environment by involving visual elements such as pictures or videos, auditory elements such as audiobooks and spoken language activities, tactile elements such as finger painting and sculpting materials, and kinesthetic elements such as motor behavior-based activities (e.g., Massaro, 2012). Research shows that young learners benefit from a cohesive multimodal environment (Rumenapp et al., 2018), that they effectively combine information from both the visual system (e.g., speaker’s facial information such as eye gaze) and the auditory system (Nguyen, 2000). Furthermore, children usually feel comfortable with using multimodal materials in their family and community contexts (Yelland, 2018).

In practice, teachers can include multimodal learning activities in the virtual classroom by engaging children in creating various multimodal forms of meaning and expression such as multimodal storytelling or digital texts through several communicative modes such as applications, digital images from Google Maps, play performance, illustrations, and photographs that complement spoken language and printed units. For example, with different “open-ended” applications that can incorporate real-world scenarios such as MadPad, Sock Puppets, and Play School Art Maker, children can create “plays” and “scenes” to later develop a storyline, a journal, or a short video (Yelland, 2018) with the aid of Microsoft’s Flipgrid or Padlet. Furthermore, to engage children kinesthetically, while being at home, through applications such as iWrite Words, children can trace letters, numbers, and words after watching letter formation, and then repeat this by bringing their hands through the sand or by using paper and pencil. In creating highly semiotic digital multimodal texts, children can use tablet technologies such as iPads, where they can put together illustrations, video, text, recordings, and other information such as maps through Book Creator (Yelland, 2018). Children can be then asked to interpret the meaning of the book in different ways: spoken language, facial expression, hand and body movements, posture or gesture, or drawings and songs (Taylor & Leung, 2020; Wessel-Powell et al., 2016) through Zoom or Microsoft Teams. Children can also create multimodal stories or journal writings (i.e., “Act it out to discover the details”) by telling the story they produced through images from Google Maps of Street View and satellite maps (Kervin & Mantei, 2017), pantomime, role-play, filmmaking, and creative drama performance practices (e.g., with the use of puppets) (Taylor & Leung, 2020; Wessel-Powell et al., 2016). Finally, using Storybird, a dynamic digital tool, children can create their own stories by choosing images from a rich collection of artwork such as colorful illustrations.

Attention and Motivation Issues

A further outcome resulting from the limited face-to-face interaction between the classroom teacher and children concerns attention and motivation issues (Kruszewska et al., 2020). In such a case, we outline how teachers can coordinate caregivers’ efforts to boost engagement, how instructions can become more explicit, and how strategies for checking children’s comprehension can become more effective.

How Teachers Can Coordinate Caregivers’ Efforts to Boost Digital Engagement

Research shows that caregivers positively contribute to children’s learning and understanding about the world (Terras & Ramsay, 2016) and there is recently much emphasis on parental involvement regarding the mediating role of parents in

children's digital literacy practices at home (Kumpulainen et al., 2020). As children's home digital learning opportunities and digital engagement depend on caregivers' technology perceptions, digital skills, and digital practices (Livingstone et al., 2015; Neumann, 2014) as well as on joint parent-child digital experiences (Kumpulainen et al., 2020), it is essential that teachers support and boost caregivers' engagement by framing scaffolding opportunities to build children's home digital literacy practices. Therefore, caregiver-teacher interaction is of vital importance during learning in online settings.

In practice, teachers need to encourage regular home-school communication as evidence shows that online settings facilitate caregiver-teacher interaction, foster caregivers' commitment to support their children's digital literacy practices, and enhance caregivers' digital skills (Smith et al., 2016). In addition, to maintain effective caregiver-teacher collaborations, it is important for teachers to be aware of caregivers' views toward their children's technology use (Wood et al., 2016), and children's home digital experiences as well as caregivers' understanding of their involvement with the school community (Shepherd et al., 2017). Over and above the important information teachers need to receive from caregivers, there is also valuable information that they need to share with caregivers. The findings of Sonnenschein, Stites and Dowling's (2020) study on parents' beliefs about young children's learning at home revealed that parents want to be aware of their children's progress and the kind of home-based activities that they can use with their children. In a similar study, Lau and Lee's study (2020) showed that parents need more interactive learning activities. Applications especially designed for connecting families to see children's products such as "Seesaw" are valuable in reaching caregivers and other adult caretakers. Another family technology tool is PowerMyLearning's Playlists, which engages students and families during online learning, such as enabling family members to take the role of the student so that the child teaches them the day's lesson.

Explicit Instruction Practices

Explicit instructional practices entail that teachers prepare well-planned lessons and direct instruction to share information with children (Spencer et al., 2012). This is because direct instruction, which refers to structured and guided approaches, facilitates mental order (i.e., process of information) (Massaro, 2012). This can be achieved by providing explanation and constructive feedback, by modeling, by offering guided practice activities (Pesco & Devlin, 2015), by explicitly guiding children through the different activities, sharing clear examples, encouraging children to provide their responses, and allowing sufficient time for practice (Spencer et al., 2012).

To verify that children understood the instruction, prior to the beginning of each task or activity, two to three examples should be completed together so that the children understand and rehearse what they are going to do. In these practice trials, after the children give their answers, the correct answer can be presented on the



Fig. 20.3 The different colors on the shared PowerPoint signify different tasks

screen and children should be given positive feedback for their responses. To point out relevance of materials and to help children in breaking down complex tasks into smaller parts, teachers can present pictures, pictograms, diagrams, and other visual displays for each task on PowerPoint through by sharing their screen with students. It is advisable to use different background colors for each task on screen because this signals to the students when one task ends and another begins (Pittas & Nunes, 2014; Fig. 20.3).

For modeling purposes, we propose video modeling, which can be provided through short videos based on which children can watch the teacher who acts as a model delivering the target instructions or demonstrating the target skill (Weng et al., 2014). After that, the teacher encourages children to imitate the target behaviors and provides opportunities for practicing the demonstrated skills (Shukla-Mehta et al., 2010). In experiments where children could communicate with the instructor while watching the video clips, students were better able to imitate the target behaviors than children who did not have any feedback from the teacher (Nielsen et al., 2008). Researchers advocate that via iPads teachers can create effective video-based instructions for use with young children in online settings (for the steps in producing the video, see Weng et al., 2014). Other useful online video editing platforms that are quick and simple to use are WeVideo or Loom.

Challenge II: Oral and Written Language

Another major challenge occurring during online learning is concerned with oral and written language. Key outcomes deriving from difficulties in oral communication in online settings are related to the acoustic and visual features of teachers’ speech processing as well as limitations in young children’s vocabularies. In facing this challenge, we suggest the adaptation of some acoustic aspects of speech, the inclusion of subtitles or captions in videos, and explicit instruction in vocabulary. In improving visual speech perception, we provide teachers with guidelines on how to enhance the quality of their video lesson. An important outcome deriving from difficulties in written language in online classes concerns teachers’ oral explanations that are substituted by texts and videos. In this instance, we illustrate how to make “easy-to-read” documents. Likewise, in online classes, the extensive use of

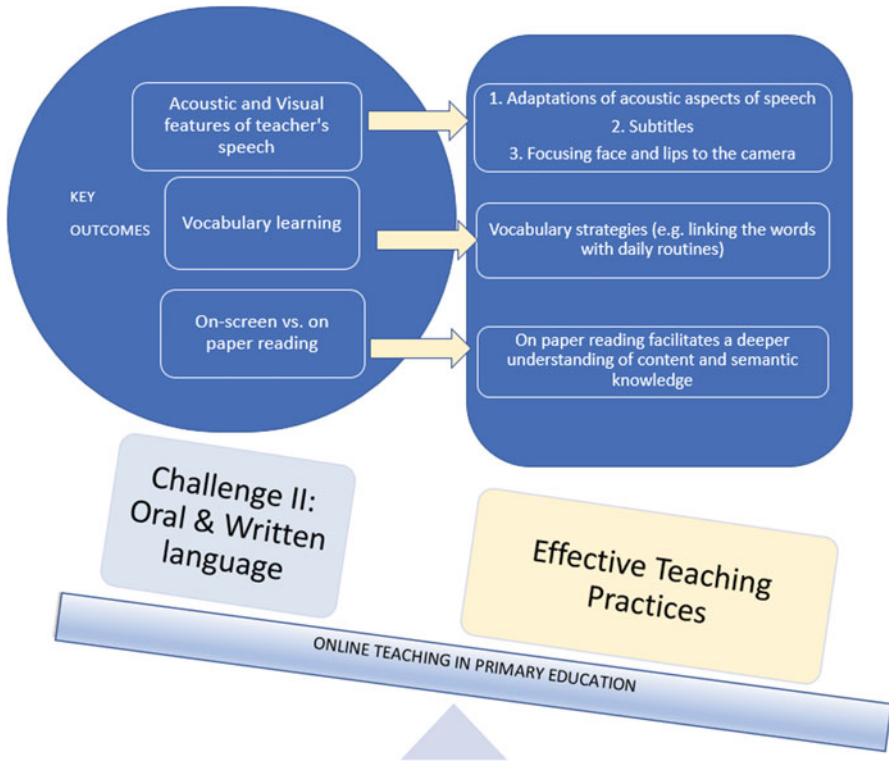


Fig. 20.4 Challenge II and the suggested practices

“on-screen reading” relates to low levels of reading comprehension. In this case, we show that “on paper reading” facilitates a deeper understanding of content and semantic knowledge. Fig. 20.4 gives an overview of the second challenge and the suggested practices.

Oral Language

Oral communication challenges may increase widely for teachers as students’ chronological age decreases. While most Grade 1 primary school children can form plural nouns correctly and producing complex sentences (e.g., using causal conjunctions such as “because”), many preschoolers are still struggling with forming plural nouns, the past tense of verbs, complex sentences, and implementing pragmatic skills, such as turn-taking during conversations (Caselli et al., 1999; Visser-Bochane et al., 2020). Regarding vocabulary, children acquire around 5200 root words from year 1 to the end of 2nd grade (2.2 per day) (Biemiller & Slonim, 2001). Therefore, in many cases, the vocabulary level of a 5-year-old child will surpass the

vocabulary level of a 4-year-old child (Lepola et al., 2012). Having in mind this diversity of language skills in our target population, we are going to focus on the difficulties risen by the acoustic and visual features of teacher speech during online classes as well as on how children can develop vocabulary online.

Acoustic Features of Teacher Speech

Provided that teachers have appropriate microphones and earphones to talk and listen to students' oral interventions, they can adapt some acoustic aspects of their speech during online classes to facilitate the perception of the message (understanding and retaining the message) and interactions with children (catching pupils' attention and managing the organization and discipline in the classroom). The so-called child-directed speech or "motherese" in which adults spontaneously adopt higher and more variable pitch when speaking to children may be applied in the classroom (Saint-Georges et al., 2013). Speech rate is one of the aspects that teachers can modulate to improve their speech intelligibility either in their synchronic online classes or in their video recordings. It is worth noting that mothers' slower speech rate has been associated with decreasing speech rates in their 3-year-old children (Guitar & Marchinkoski, 2001), so we could infer that reducing teachers' speech rates might have a similar effect and benefit students' communication skills as well.

Intensity and pitch are the other aspects of speech prosody that teachers usually modulate in vivo and virtual classroom settings compared to non-classroom speech (Remacle et al., 2021). However, while there is not much evidence that the increasing of intensity and pitch improves students' understanding of the message (maybe just attention to the task), it might generate phonotrauma and pathologies such as vocal fold nodules and polyps for the teacher (Manfredi & Dejonckere, 2016) due to vocal strain, so we do not recommend live adaptations in those two aspects. Alternatively, teachers can take advantage of technology tools by modulating the quality of the sound by means of specialized software for streaming or video editing purposes (e.g., Adobe premiere) or by means of speech therapy applications. For example, the VocalFeel App provides acoustic and visual feedback on voice quality in speech processing (i.e., intensity) and Quiet Classroom—Noise Alarm allows controlling for noise during lessons. Another solution could be to include subtitles or captions in videos. There are several programs for adding subtitles or captions to videos (e.g., Subtitle Horse). The empirical testing of the impact of subtitles on cognitive load in Pre-primary and Primary school children is very scarce; therefore, although it is a promising educational resource for remote education, the theoretical "side effect" on increased cognitive load produced by subtitles must be considered. The acoustic features of speech (e.g., pauses and pitch changes) might also affect turn-taking between students and the teacher. Technology resources may be used to enhance this process during videoconferencing with young children (e.g., teaching children to use the "raise hand" or "nod" features in Zoom or Teams videoconferencing software; see example in Fig. 20.5).

Fig. 20.5 “Raise your hand” feature of the Meats videoconferencing software. It can be used easily by students to answer yes/no questions or make a quick poll without the necessity of connecting the audio and video features (students are 7 years old in this example)

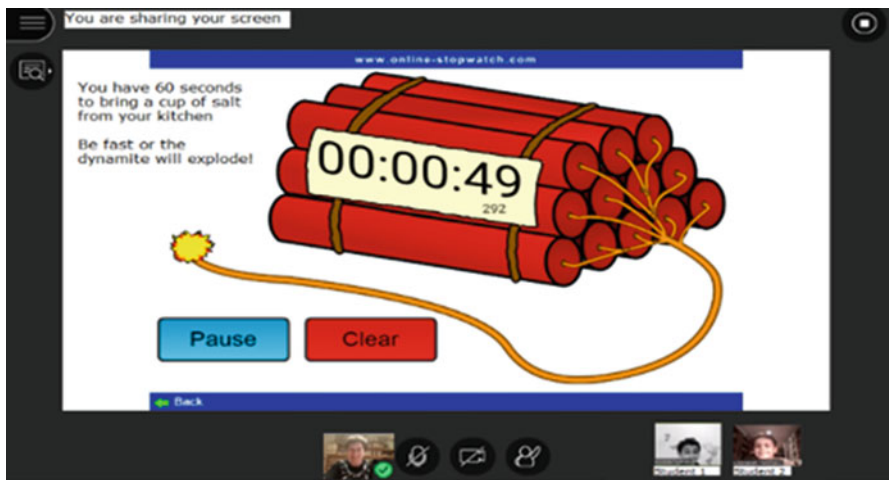
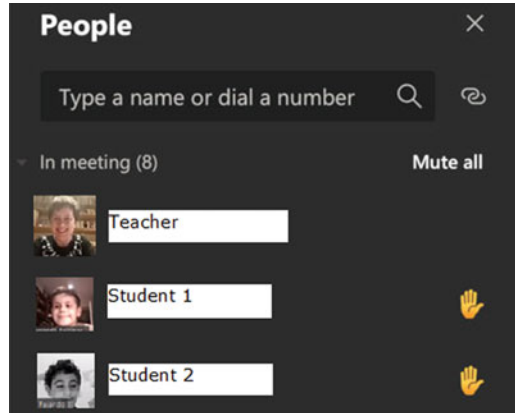


Fig. 20.6 Online countdown timer from <https://www.online-stopwatch.com/classroom-timers> shared in a Blackboard Collaborate videoconference session

Teachers can also share the videoconferencing screen with an online countdown timer so students are aware of the time left in completing a task. For instance, with the “dynamite” timer showed in Fig. 20.6, even children who do not understand time in digits can infer that the time is finishing based on length of the dynamite wick: the shorter the wick, the less time remains. In addition, the dynamite wick is visible from distance hence students can have quick looks at the countdown timer if they are not seated in front of the computer. Another technology tool that can be used to address the time issues is the Time Timer application that shows the time available for completing a task.

Visual Features of Teacher Speech: Lip-Reading

Speech perception is not only an auditory experience, but it also depends on visual information coming from the lip movements. The McGurk effect (McGurk & MacDonald, 1976) is a perceptual effect that shows the interaction between hearing and vision in speech perception. The illusion occurs when the auditory component of one sound (/ba-ba/) is paired with the visual component of another sound (/ga-ga/), leading to the perception of a third sound (/da-da/). The McGurk effect seems to be higher in adults compared with 3–6-year-olds and 7–9-year-olds but not with 10–12-year-olds (Hirst et al., 2018). In addition, it seems that lip reading skill is associated with reading in such a way that primary schoolchildren who are better lip-readers are also good at reading words and sentences (Harris et al., 2017; Kyle et al., 2016). Given that the quality of the visual signal might negatively impact visual speech perception (e.g., Tye-Murray et al., 2016), the recommendation is that teachers connect the camera during videoconferencing by focusing on the face and lips. Although during online classes, in sanitary lockdown situations (see COVID-19), the use of facemasks is not necessary because teacher and students are not usually sharing the same physical space, it might be the case that the teacher is carrying out “hybrid teaching” (e.g., half of the students are at home and the other half attend their classroom setting) or sharing the teaching office with other professionals so they have to use facemasks. In these cases, the recommendation is to use transparent facemasks as the model shown in Fig. 20.7. Different types of transparent face protections have been approved by the US Food and Drug Administration (FDA) or the Spanish administration (e.g., Spanish Ministry of Consumer Affairs, 2021).

Fig. 20.7 Teacher with transparent facemask. This type of facemask allows lip-reading and can be used during hybrid teaching when part of the students is online and part in vivo



Vocabulary Learning

An extensive body of research demonstrates the unique contribution of vocabulary to children's comprehension (Oakhill et al., 2019). Thus, linking the words with daily routines, encouraging children to ask questions (Spencer et al., 2012), helping children in making inferences (Oakhill et al., 2019), asking children to identify a similarity between a pair of words, for example, "apple – banana" or to orally explain what a given word means, for example, "what does . . . mean?" or "what is a . . .?" (Pittas, 2018) are some of the strategies that teachers can use for monitoring children's vocabulary comprehension. In online settings, these strategies can become more effective with the use of digital educational tools that check children's performance in real-time and allow for pre-specifying the time needed for children to provide their response (as extra-verbal language is limited in online situations). For example, using Nearpod teachers can create multimedia presentations to illustrate the words and provide children with the opportunity to orally choose or digitally match the correct meaning of the target word. Using Kahoot, teachers can create interactive quizzes to allow children in connecting the words with pictures of objects from their everyday environment. Finally, given recent research outcomes of the contribution that multimedia stories have on vocabulary development (Zhou & Yadav, 2017), digital tools such as Storybird for creating picture wordless books are very beneficial.

Written Language

Considering that children are learning to read and spell in preschool and in the early years of primary school, an important challenge for them is that written language is often more complex and formal than oral language (Cain, 2010; Dawson et al., 2021; Pittas & Nunes, 2017). Also, on-screen and on-paper reading might foster different reading strategies (see Salmerón et al., 2021 for a discussion). Therefore, to overcome this written language challenge, we consider "easy-to-read" texts as well as the advantages and drawbacks of on-screen reading.

Use "Easy-to-Read" Guidelines

Written texts are used as a means for young children to learn new words (Joseph & Nation, 2018; Mak et al., 2021) or sentence structures. There are times teachers need to be particularly sure that children understand the message, such as when giving task directions (e.g., How to make a salt dough dinosaur) or explaining complex abstract concepts. At these times, the use of simplified language is preferred.

Table 20.2 Instructions to make dinosaur fossils using salt dough in original form and simplified

Instructions to make dinosaur fossils using salt dough	
Original text	Easy-to-read text
Instructions	How to make it
1_Water must be added to salt and flour gradually.	1_Add water to salt and flour little by little.
2_Knead the ingredients together with your hands until it forms a solid ball and flatten it.	2_Make a small ball of dough with your hands.
	3_Press it flat with the palm of your hand.

Teachers can use the recommendations for making “easy-to-read” documents of the International Federation of Library Associations and Institutions—IFLA (Nomura et al., 2010) or “Inclusion Europe” (2020, March 31). Examples of these recommendations are: “Use high frequency and concrete words,” “Use symbolic language (metaphors) sparingly,” or “Avoid several actions in a single sentence” (see example in Table 20.2). Teachers can also use “easy to read” resources such as the SM editorial corpus of “easy to read” literature for children from diverse backgrounds.

“Easy-to-read” guidelines make recommendations of how to simplify texts but when teachers have to implement the recommendations, it is difficult to decide if the alternative is easier than the original form. In this case, normative database of word frequency and other word properties can help to make decisions. For instance, Subtlex is an online database that provides information about word frequencies, consisting of a million words, obtained from movies and TV series subtitles. These subtitle-based databases have been created for a number of orthographies such as Dutch, American English, Chinese, Spanish, German, Greek, British English, Polish, Italian, and other languages, and there is a separate corpus for young children. *EsPal* (Duchon et al., 2013) is a similar database that provides information about the word frequency as well as the orthographic or phonological structure of words encountered in books and film subtitles.

Nevertheless, it should also be pointed out that most of the traditional “easy-to-read” recommendations might be too superficial because they focus at the word and sentence levels and do not improve the overall coherence of the texts helping children to integrate sections or passages (Arfé et al., 2018; McNamara et al., 1996). As a result, the use of cohesion devices to increase text coherence such as connectives or discourse markers (topic sentences, headings, or typographical contrast like the use of boldface or italics) might help students to understand the text structure and make inferences (Arfé et al., 2018). *Coh-metrix* (McNamara et al., 2014) is a tool for the automatic evaluation of text cohesion in English and can be used online. Therefore, educators can instantly assess the difficulty of a given written text for the target students. Finally, we should note that simplified texts are less rich

than original or authentic texts (Crossley et al., 2007; Fajardo et al., 2013). Effective text simplification involves a trade-off between the original linguistic structure of the text and the reduction of the text's difficulty at global (i.e., improving text coherence) and local levels (making words or sentences more understandable). These adaptations can help young children understand the texts until they become experienced readers.

“On-Screen Reading” versus “On-Paper Reading”

An additional difficulty that the use of texts in online classes involves is that on-screen reading might have a negative impact on reading comprehension in comparison to reading text printed on paper reading (Annisette & Lafreniere, 2017; Delgado et al., 2018). A meta-analysis conducted by Delgado et al. (2018) examined research from 2000–2017 that compared reading texts on paper with reading on digital devices. The meta-analysis revealed that the paper-based reading represented an advantage in situations where time was constrained reading and that the paper-based reading advantage was consistent across studies using informational texts, or a mix of informational and narrative texts, but not on those using only narrative texts. However, the studies included in the meta-analysis involved mostly undergraduate students using computers. Thus, Salmerón et al. (2021) tested later the screen inferiority effect on upper primary school students using tablets instead of computers. The researchers concluded that on-screen reading using tablets does not induce higher on-task distraction of primary school students than printed text and that printed text supported better comprehension than tablets, but only for primary school students with low comprehension skills reading under time constraints. The recommendation for teachers is to ask early readers to use printed materials when possible, especially when informational texts are used within a time-constraint context. In cases where printers are unavailable, we suggest that teachers take into account the more superficial reading style that on-screen reading conveys and, thus, encourage students to engage with in-depth processing through tasks such as writing keywords (Lauterman & Ackerman, 2014; Delgado et al., 2018). Lastly, tablets should be preferred over computers when possible (Salmerón et al., 2021; Støle et al., 2020). Tablets offer several advantages over desktop computers. First, they are more portable and easier for children to handle, the clarity of pictures and words is comparable to that of print, and physically interacting with the tablet helps to focus on the task of reading (Salmerón et al., 2021).

Conclusion

The aim of this chapter is to reflect on the implications with respect to the suggested research-informed approaches that teachers can use to enhance their teaching effectiveness. In enhancing active learning in online classes, we provide statements of

support for the use of problem-solving practices and multimodal digital learning activities to strengthen the link between discovery and learning. With the use of problem-solving practices, combined with various technology tools and interactive media, children experientially develop new knowledge as well as products of their understanding. Furthermore, the use of multimodal learning activities, combined with user-friendly digital applications, supports children in creating multimodal forms of meaning and expression. To foster attention and motivation in online teaching and learning settings, teachers can design/provide online learning opportunities by coordinating caregivers' efforts to boost digital engagement and providing explicit instructions.

In improving speech intelligibility and voice quality either during online classes or during video recordings, the acoustic and visual features of teacher speech can be monitored for facilitating the perception of the message and child-teacher interactions. In helping children process written language, texts can be simplified by following the "easy-to-read" guidelines. In supporting children with written language, there is robust evidence that "on paper reading" facilitates a deeper understanding of content and semantic knowledge in comparison to "on-screen reading."

The teaching practices described in this chapter were meticulously selected and transformed to ensure that they would be effective in online classrooms and consistent with current research. These practices described in the chapter are appropriate for use in preschool and in the first critical years of primary school. Overall, each of these research-informed practices demonstrates that digital educational tools are interactive, enjoyable, and easy-to-use. When carefully selected and properly implemented, online approaches can enhance collaborative learning in visual and other formats, provide evidence of learning, and foster caregiver-teacher interaction as well (see Table 20.3).

Young children's learning can be supported through best practice principles applied to online settings, as well as through online collaborations with caregivers/families that support student engagement and result in better learning outcomes. If teachers become aware of these research-informed strategies and combine them with high-quality technology tools, interactive media, and digital applications, then teachers can make online teaching and learning much more effective. Rather than dwelling on the limitations of online pedagogies, early childhood educators need to seek ways to expand their instructional technology repertoires and, in doing so, enhance young children's interactive online learning.

Table 20.3 Online resources for enhancing teaching practices

Challenge	Teaching practice	Technology tool	URL	Description	Availability	Age group
Face-to-face interaction challenges	<i>Problem/project-based learning</i>	Padlet	https://padlet.com/	Online blank wall board	Free	3–7 years
		Popplet	https://www.poppolet.com/	Online Mind Map	Free	3–7 years
		Project Pals	https://www.projectpals.com/	Online project management tools	Free trial	4 ½–7 years
		Edmodo	https://new.edmodo.com/		Free	3–7 years
		Microsoft's Flipgrid	https://info.flipgrid.com/	Video-based platform	Free	3–7 years
		Google Maps	https://www.google.com/maps	Web mapping service	Free	3–7 years
		MadPad	https://www.youtube.com/watch?v=G_1_0N7xVtY	Open-ended applications	Free	3–7 years
		Sock Puppets	https://www.educationalappstore.com/app/sock-puppets		Free	
		Play School Art Maker	https://apps.apple.com/au/app/play-school-art-maker/id473900831		Free	
		iWrite Words	https://apps.apple.com/us/app/writewords-handwriting-game/id307025309		Free trial	
Book Creator	https://bookcreator.com/features/	Tablet technology	Free trial	4 ½–7 years		
Storybird -Artful Storytelling	https://storybird.com/	Digital story-building application		5–7 years		

(continued)

Table 20.3 (continued)

Challenge	Teaching practice	Technology tool	URL	Description	Availability	Age group
Oral language challenges	<i>Caregiver-teacher interaction</i>	Seesaw	https://web.seesaw.me/family-communication	Caregiver and family applications	Free trial	3-7 years
	<i>Video-modeling/ Video-based instruction (Teaching tools)</i>	PowerMyLearning Playlists	https://powermylearning.org/	Online video creation and editing platform on a Windows computer	Free	3-7 years
		WeVideo	https://www.wevideo.com/	General video creation on a Mac or iPad	Free trial	3-7 years
		iMovie	https://apps.apple.com/au/app/imovie/id377298193?%0A=www-us-ios-imovie-app-imovie	Screencasting tool	Free	3-7 years
		Loom	https://www.loom.com	Video editing software	Free trial	3-7 years
	<i>Acoustic features of teacher speech—Teaching tools</i>	VocalFeel	https://play.google.com/store/apps/details?id=com.ovolab.vocalfeel	Speech Therapy Application	Free trial	3-7 years
		Quiet Classroom—Noise Alarm	https://play.google.com/store/apps/details?id=com.quietclassroom.jd	Alarm to control for noise levels	Free	3-7 years
		Subtitle Horse	https://subtitle-horse.com	Subtitle and captions editor	Free	4-7 years
		“Raise hand” or “Nod” features of videocalls	https://ditchthattextbook.com/microsoft-teams/	Set of student tips for video calls with Teams	Free	4-7 years
		“Dynamite” timer	https://www.online-stopwatch.com/classroom-timers/	Online countdown timer	Free	5-7 years
Time Timer		https://play.google.com/store/apps/details?id=com.time.timer.android&gl=ES	Time organizer	Free	5-7 years	

	<i>Vocabulary learning</i>	Nearpod	https://nearpod.com/	Multimedia Presentation Free Creator for interactive lessons (Quiz, Polls, Videos, Collaborate Boards, etc.)	Free	4-7 years
Written language challenges	<i>"Easy-to-read" — Teaching tools</i>	Kahoot	https://kahoot.it/	Game-based learning platform	Free	5-7 years
		"Easy-to-read" guidelines of IFLA	https://www.ifla.org/publications/guidelines-for-easy-to-read-materials	"Easy-to-read" resources	Free	
		"Easy-to-read" guidelines of "Inclusion Europe"	https://www.inclusion-europe.eu/easy-to-read/			
		SM editorial	https://es.literaturasm.com/lectura-facil#ref	"Easy-to-read" database		
		Subtlex Dutch, Am. & Br. English, Chinese, Spanish, German, Greek, Polish & other	http://err.ugent.be/programs-data/subtitle-frequencies	Word frequency subtitled-based corpus		
Espal Spanish	https://www.bcbl.eu/data/bases/espal/					
		Coh-matrix	http://cohmatrix.com/	Computational tool for cohesion and coherence metrics		

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Chapter 21

Remote Teaching and Learning in Early Primary Contexts: A Qualitative Study of Teachers and Parents During the COVID-19 Lockdown



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The COVID-19 pandemic impacted education systems around the world resulting in global school closures. April 2020 saw the peak of school-closures world-wide, at which point 190 countries had closures in place (World Food Programme, 2020). The pandemic evolved quickly, resulting in limited time for teachers and educational administrators to modify education programming. Despite the many challenges the pandemic provided opportunities for educators and administrators to showcase innovative teaching approaches (Pálsdóttir, 2020). Countries around the world developed their own policies and programming to best support students and teachers. In the United States, in-person learning ended in March 2020 in hopes to curb the spread of COVID-19. As the country worked to reopen schools, policy makers and scholars urged educational administrators to draw from countries who had limited spread of COVID-19 in schools which included China, Denmark, Norway, Singapore, and Taiwan (Melnick & Darling-Hammond, 2020). China closed many schools in January 2020 and had reopened most by March of 2020. Denmark was the first country in Europe to reopen schools starting on April 15, 2020, for students under 12 years of age whereas older students continued learning remotely. Norway reopened preschool on April 20th and students ages 6–11 returned to school on April 27th where COVID-19 infections were limited. Like Denmark, students aged 12 and older in Norway continued learning at home. Singapore implemented a different model of allowing schools to remain open until April eighth at which time students moved to online learning until early May 2020. In Taiwan, schools were only closed in regions where COVID-19 infections were high (Melnick & Darling-Hammond, 2020).

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Ontario Canada—the location of the current research—mandated that all schools close in March 2020 for the remainder of the school year. However, in an effort to continue learning, the provincial government rolled out an online teaching and learning program titled “Learn at Home” which began in early April 2020 (Nagle et al., 2020). Minimum expectations for required hours of student work were provided for elementary and secondary grade levels. For early primary grades (Kindergarten to Grade 2), teachers were mandated to focus on literacy and math, and prepare 5 h of work per week for each student (Ontario Ministry of Education—OME, 2020).

The shift from in-person teaching to remote instruction requires training and professional development to support the adaptation of curriculum content and pedagogy. Although limited, teachers in Ontario had access to resources to aid them with the shift to remote teaching and learning. These resources were provided through the Ministry of Education and the Ontario College of Teachers. The focus was on professional aspects of remote teaching, such as electronic correspondence, video conferencing guidelines, a library of eBooks, and relevant research (Ontario College of Teachers, 2020). Given that many educators and students lack experience with online learning, it was unsurprising that there were continuous calls for additional professional development to support educators during the transition (Lockee, 2021; Nagle et al., 2020). This was particularly true in kindergarten and early primary grades given that teaching and learning in these contexts are primarily play- and inquiry-based.

Early Years Pedagogy and Curriculum

In the early years, curriculum and pedagogy are complex, shaped by the educators, families, and the child (OME, 2014a, b). Ontario’s pedagogical document, *How Does Learning Happen?* (OME, 2014a, b), was designed to support early years educators in understanding the child and their role as educators. Pedagogy is targeted at achieving curriculum goals of supporting well-being, learning, and development of the child. The extant literature suggests that the most effective early years pedagogical approaches build positive child–adult relationships (Hattie, 2008), encourage exploration, and promote play and inquiry (OME, 2016), and view educators as “co-learners” who learn with their students (Katz & Dack, 2012). With a range of early years pedagogies, play- and inquiry-based pedagogies have proven most useful in supporting learning (OME, 2014a, b).

Play and inquiry in the early years offer children opportunities to interact with the world around them and contribute to furthering important skills such as problem solving, collaboration, and communication (Fullan, 2013; Pang & Simoncelli-Bulak, 2017). As innately curious beings, play provides the platform for children to explore their environment, express their thinking, build theories, and make meaning (OME, 2016). Educators guide children through their natural inquiry, whereby learning is not limited by a particular subject, but rather it is co-constructed with the teacher through an iterative process of wondering, questioning, and exploring (Becker & Mastrangelo,

2017). Through this process, educators provoke further thinking within the child by asking questions (Becker & Mastrangelo, 2017; Harris et al., 2017; OME, 2016) such as “what do you think?” or “I wonder what would happen if. . .?”. Through this inquiry-based process, educators make decisions about student learning.

In the context of play- and inquiry-based environments, the role of the educator is paramount. As educators guide children through the inquiry process, they intentionally and purposefully “listen, observe, document, analyze, . . . and provide feedback through questions and prompts that effectively extend thinking and learning” (OME, 2016, p. 24). This purposeful engagement allows educators to continually provide direction to the individual needs of each student. This engagement is fostered through the classroom environment, in which educators arrange resources and materials as the learning process unfolds, thus creating a dynamic learning environment (Gandini, 1998; OME, 2016).

Included in this process for educators is the ongoing assessment of student learning. Through the inquiry-based process of asking questions and observing, educators gain insight into the child’s thoughts, understanding, and learning processes (OME, 2010, 2016). Formative assessment “occurs frequently in an ongoing manner during instruction, while students are still gaining knowledge and practising skills” (p. 31). Formative assessment includes a wide variety of methods that involve gathering information for the purpose of “helping students improve while still gaining knowledge and practicing skills” (OME, 2010). The iterative formative assessment process is intended to inform the daily practices of educators as they seek to deliver the early years curriculum.

The play- and inquiry-based curriculum in the early years focuses on developing foundational social, emotional, and cognitive skills needed for academic success. Academic learning outcomes in these contexts include an emphasis on supporting literacy, language, and mathematics behaviors. Basics of literacy are practiced in the early primary environment through daily communications (e.g., greetings), expressing feelings and thoughts (e.g., sadness or hunger), and learning to understand non-verbal communication (Weigel et al., 2016). Mathematics behaviors are practiced through making comparisons (e.g., who is taller), solving problems, and manipulating objects (e.g., using building blocks to construct a tower) (Hannula-Sormunen et al., 2019; Lee, 2012; Zippert & Rittle-Johnson, 2020). The early primary grades serve as a context for children to practice and refine these skills; importantly, these years have been viewed as the foundational years for life-long skill development in literacy (Suggate et al., 2018) and mathematics (Ribner et al., 2017).

High-quality early primary classroom environments integrate literacy and mathematics throughout the day. In this environment, educators use their professional judgment to provide varying levels of support for each student within their zone of proximal development (e.g., Breive, 2020). With the sudden move to remote teaching and learning, there was no longer the opportunity for educators to provide this in-the-moment, targeted support for learning that was central to their teaching practice (Timmons et al., 2021). As such, it was not surprising that remote teaching and learning proved difficult for educators, as they lacked the necessary training and resources. Additional barriers were faced by early years educators who were

primarily delivering a play- and inquiry-based program, which is dependent on a scaffolded learning process, social interactions, and formative assessment practices. In addition to a novel reliance on technology, educators in the early years need to work with families in ways that extended beyond their traditional role as educators.

This research sought to capture the experiences of educators and families as they transitioned to remote teaching and learning. This work was guided by two research objectives: (1) investigate how early primary educators (kindergarten to Grade 2) planned, taught, and assessed learning remotely, and (2) to examine the impact of this move to remote teaching and learning on teachers, early primary children, and their parents.

Methodology

Following university ethics approval, early primary educators ($n = 25$) and parents ($n = 11$) were recruited via social media platforms (e.g., Twitter and Facebook) as well as through snowball sampling which is the process of having current participants aid with recruiting potential participants. Recruitment through social media platforms and snowball sampling allowed for a broad sampling of educators and families across Ontario. These procedures sought to improve population integrity in recruiting and ensuring that participants came from urban, suburban, and rural contexts. Despite these efforts, the majority of educator (84%) and parent (89%) participants were from urban and suburban contexts. The educator participants had from 1 to 20 years of teaching experience with an average of 6.5 years in their professional roles. Data collection included 45-min semi-structured interviews conducted via Microsoft Teams or a password-protected Zoom meeting. All interviews were conducted by the Principal Investigator.

The educator interview asked questions related to the following: school and school board resources; perceptions of the impact on students, parents, and educators; planning; teaching and learning; play-based learning; assessment; transitions back to in-person learning; and recommendations for improvement (short- and long-term). The parent interview asked questions related to the implementation of remote learning; child engagement, impact on parents and children; parental roles, transitions back to in-person learning; and recommendations for improvement (short- and long-term).

The interviews were transcribed verbatim by a trained doctoral research assistant. Once transcribed, a data-driven codebook was developed by the principal investigator through an initial inductive coding of the interviews. Next, a 1.5-h meeting was held with all research team members (principal investigator and doctoral research assistants) to review the initial data-driven codebook. At this meeting, any lack of clarity in coding structure was discussed. Following the meeting, the principal investigators revised the data-driven code book using the feedback received. A second, 2-h meeting was held where the research team further discussed and

reviewed the revised data-driven codebook. Questions regarding the coding structure were discussed and minor keyword modifications were made.

Following the training meetings, the two doctoral research assistants individually coded 6 interviews (3 teacher and 3 parent interviews) to assess inter-rater reliability. Next, a third research training meeting (1.5 h) allowed for the coding procedures and data-driven codes to be reviewed, and additional minor changes were made to the codebook. Inter-rater reliability of 98% was achieved. Reliability was calculated by comparing agreements divided by agreements and disagreements.

The purpose of the thematic approach is to condense the raw interview data into a summary format and clearly link research objectives and findings derived from the raw data to ensure transparency (Thomas, 2006). As such, the interview data was coded thematically using the data-driven codebook (Patton, 2015; Thomas, 2006). Following the procedures of Patton (2015) and Thomas (2006), similar codes were grouped together into categories. Next, the data within the categories were examined to identify broader patterns known as themes. Narrative descriptions of the themes were then generated (see Table 21.1).

Results

Five themes emerged from the data. Table 21.1 includes a description and frequency count for each theme. Please note that parent participants are represented using a “P” and educator participants are represented using a “E” throughout the results section. Theme 4, Focus on Formative Assessment only included data from educators.

Table 21.1 Overview, description, and frequency of themes

Theme.	Description	Frequency
1. Parent involvement	Educators and parents discussed the multiple challenges and duties of parents and the varying degree of involvement	19 for educators 11 for parents
2. Role of educators and administration	The role that educators and administrators play in developing and delivering remote teaching and learning	10 for educators 11 for parents
3. Curriculum and pedagogy	Examples of curriculum delivered through remote teaching. This includes ways in which the curriculum and pedagogical approaches have been modified for remote teaching and learning	11 for educators 10 for parents
4. Focus on formative assessment	Assessment during remote teaching included formative but not summative approaches. Discussion focused on the struggles of formative assessment	19 for educators
5. Suggestions for future	Educators and parents provided recommendations for both the continuation of remote learning and the return to in-person teaching	11 for educators 11 for parents

Parental Involvement

The COVID-19 pandemic was accompanied by enormous disruptions to parenting. Educators reported high variability in the level of parent involvement in home learning. Educators emphasized the need to provide families with flexibility given the multiple responsibilities that are managing at home and work. One educator discussed the ongoing support that early primary students need from parents: “none of it is mandatory, it’s really important to know that because primary kids need so much support, that they really do need an adult next to them, like one on one to do any kind of remote learning. I have been really clear with parents saying, ‘you know it’s here for you to use, if you would like to, you know best, what the energy level is like in your house, and what the child can manage. And what I really don’t want is for anything like this to cause friction in your home’” (E18). Similarly, another educator discussed how they posted all work on their website for families to access at their leisure, “I have my website, it’s there for the families to use at their convenience. I understand there are individual circumstances for each family. That is why we have the flexibility to better meet the needs of all families” (E16). These quotations suggest that educators understood the increased support that students would require from their families which may be difficult given their home circumstances and socioeconomic status. Parents also discussed the flexibility that was offered. Parents stated that tasks were posted weekly and, “It was up to parents to decide how to divide their time and when they wanted to complete the different tasks throughout the week” (P11). It was clear that educators were trying to be flexible in their teaching to support families and the varied home environments.

The level of parent involvement depended on the comfort level of the adults and previous experience with education. Parenting involvement in home learning was dominated by mothers. Only one educator and two parent participants reported that fathers were involved in supporting home learning. One educator discussed challenges a mother was experiencing due to feeling unprepared to support her child’s learning, “I had a student who was not handing in work, and I contacted her mother, and over the course of the conversation, the mother admitted that the highest level she graduated was grade 8. She doesn’t have the things in place to be able to organize and schedule and do all of those herself” (E25). One educator discussed how the principal would become involved during instances of little to no parent involvement to ensure that the student was safe at home. Another educator was asked about the role of parents during remote learning, and they listed several roles, “They are technical facilitators, workload organizers, and co-learners! They are adaptors and cheerleaders and nurturers and emotional supporters of their children. They are the play-based inquiry leaders” (E24). A parent shared their perspective that they (parents) were taking on the role of educators, “. . .every parent is acting as an educator at home. . .because any time their child literally cannot do the work without assistance. . .parents are the ones who are doing the teaching” (Parent 9). This suggests the added roles of parents during remote teaching and learning. It is important to note that these added roles were not feasible across home environments

leading to additional inequities. Despite having more roles to play, participants also discussed the benefits of additional parent involvement. For example, one parent discussed spending more time with their child, “The only thing he really likes. . . about remote learning, is when there’s an activity to do that requires a parent to do it with him that he actually gets to spend the quality time with us doing activities” (P2). Therefore, although the transition to remote learning may have placed additional stress on parents, it seems that it can also lead to more time spent with their children as one parent reported.

Educators reported that communicating with parents was a challenge during the pandemic. One educator stated that prior to remote teaching and learning, parents “could send notes with their child or just come to school and talk to me but now that option is off the table. . . And so just communicating with families. . . has been challenging” (E21). Findings suggest that there were clear differences in parental involvement, with some being very involved and others being difficult to access. In this study, educators reiterated the need to involve parents and maintain ongoing communication as a means of supporting children’s learning in the early primary grades.

Role of Educators and Administrators

Findings emphasized the role that educators play in supporting parents. When parents discussed the role of educators in remote learning many of them discussed how understanding and flexible the educators were being. This parent explained further, “. . . but I did notice that last week she sent us out a message and it said ‘I know a lot of you are feeling frustrated that you can’t print or are being asked to print, or that it’s a lot to save a file, upload it’ . . . so she wrote a message and just said ‘this is not a requirement, please don’t feel like you have to do this, I don’t want to stress you out’, the tone was very friendly and accommodating” (P2). One parent also expressed how impressed they were with the quick transition and effort put into the delivery of remote teaching, “. . . I’m actually really impressed that people have managed to get everything up and running, it really seems like they’re into it and they’re trying, and I know enough educators that I know how hard it is to get the stuff organized, so that has impressed me, how quickly everyone has mobilized” (P10). This level of support and care also extended from educators to their students.

Additional educator roles included updating websites or Google Classroom platforms with activities and resources. A parent discussed the many resources that were provided by the educator and the Early Childhood Educator (ECE), “So both educators and both ECEs post stuff. . . you know for all the kids, and so what they did at the beginning is they used google classrooms and they provided us with. . . a whole slew of resources” (P4). Another parent reported how the educator and ECE check in regularly and provide feedback, “the educator or the ECE has called us once every two weeks, just to kind of check in on things. . . basically any time we submit something we get a response” (P7). However, not all parents were pleased with the

implementation as explained by this parent, “. . . there appears to be. . .the interest in making online learning, or ‘Emergency Remote Learning’ look so bad, that the union priorities are met, in that nobody wants remote learning because it sucks. So, there’s a bare-minimum-it is that I’m seeing. . .” (P9). Therefore, parents held varying perceptions on the effectiveness of remote learning. Overall, parents reported that educators were facilitators of the learning process and provided ongoing support.

Findings also highlight the important role that educators and administrators play in the delivery of remote teaching and learning. Educators discussed the curricular content that they delivered and the focus on maintaining relationships with students and families. Educators emphasized how appreciative they were of the support that they received from administrators through the provisions of guidance and resources for remote teaching. For example, one educator raved about how supportive and accessible their principal was, “My principal is great, so he has open office hours twice a week if we have any questions, he’s very accessible through phone, he comes on when he can too – I do a once-a-week class meeting, so he comes on and supports me on there” (E8). However, the level of support varied within and across school boards. More specifically another educator reported how they felt less supported at the board level “And, again, they’re sending you emails, the board, but they are one-directional. Whereas if you tried to get in contact with them that is very difficult. . .” (E25). A different type of support included the provision of technological training as described by this educator, “The board has also provided us PD for google classroom, so through EdTech, I think we can attend some seminars to support us as well” (E21). Educators also discussed the helpfulness of having educational administrators contact families who were difficult to reach. One educator explained how their educational admin had helped with posting, “Admin has been, uber good with their offers of help and posting common things. . .” (E9). Findings uncovered how appreciative educators were with the support that they received from administrators.

Curriculum and Pedagogy

The transition to remote teaching required educators to modify the curriculum. Participants discussed organizing lessons around topics, “they’ve set aside different kinds of topics or areas, so they have art, sharing circle, like a morning message, a literacy component that has to do with reading or writing, a number sense. . .They have a stem challenge every week, some sort of physical activity or outdoor learning” (P11). Similarly, another parent explained how the activities were organized according to the subject, “Every week has a folder. The math folder and reading, French, religion, now we have another tab called science, and then in the home page you see all these apps” (P5). Many educators were told to focus on

literacy and math, however, some tried to incorporate outdoor learning and art. A parent explained that the emphasis for her child was on literacy and math, “I would say it’s mostly literacy and math, so my son’s educator is also a music educator for the school, so she’s posted some songs. . .” (P10). A few parents discussed how their children were losing interest in the work.

There was a mix of asynchronous and synchronous learning offered to students. Some educators were instructed by their principal to not engage in any synchronous delivery. However, other educators were able to engage in synchronous teaching according to this parent, “she has little projects, nothing major, but you know here’s some questions about a stuffy that you like so they have to write the answers in French and share it with the class. . .so they get to see all their friends” (P10). In relation to planning, multiple educators discussed how their planning had changed, “Planning is completely different, just because you have to take the component out that I’m not fully accessible to kind of talk you through everything” (E25). Similarly, another educator explained how their planning was different and more demanding, “I would say that the planning that I do now is more intense than the planning that I do in the classroom. Simply because I feel like, we’re, on a time crunch, and because I can’t be there immediately to teach the lesson. . .” (E12). One educator also highlighted that there are fewer opportunities for emergent planning, “Now I’m actually planning ahead of time. I don’t plan way ahead of time in the classroom because of the way we are teaching and want it to be mapped onto their interests” (E16).

One aspect of planning that had stayed the same for a few educators included the use of long-range plans, “I kind of kept my long-range plans in mind” (E2). Something that many educators struggled with was the lack of differentiation. This educator elaborated, “It’s mostly in terms of resources, my planning has definitely one of the steepest learning curves, because I got my first week of activities up in a matter of days, and I was not terribly proud of them because I really, I’m anti-worksheet person, I like hands on activities, I like small group work, and the idea of putting up the same work for 27 kids was very jarring” (E9). A few educators reported spending more time on planning as this educator mentioned, “. . .I mean I’m spending way more time on the computer planning” (E8). Educators also described how they tried to include play-based learning “In terms of play-based, I could still make it play-based I just have to plan my activity using play. For example, I’m teaching them symmetry, one of the activities was for them to build a symmetrical building” (E12). One educator explained how they designed all activities around a play-theme, “I think I’m trying, obviously, since it’s a play-based model, I think that’s something I’ve had to keep in the back of my head. We kind of have a play-theme” (E8). There was also a conscious effort by educators to not release any new content as described here “We’re very conscious, we’re not introducing anything new. . .this is not the time for new stuff” (E17). Findings highlighted that educators struggled with modifying their play-based inquiry activities for remote delivery although they tried to use familiar activities to support student learning.

Focus on Formative Assessment

A focus on formative assessment emerged as an overarching theme. Given that educators were no longer permitted to provide a summative assessment (beyond what had been evaluated up to the last day of in-person learning), this focus on formative assessment was logical. One educator explained that “I’ve been told by admin just to focus on formative, so there’s absolutely no summative assessment going on right now” (E7). Formative assessment was mostly comprised of “positive, caring, and compassionate feedback, in order to praise them for participating at all, and very small, slight nudges in the right direction, should they be missing the mark” (E18), as described by one educator.

Educators noted several challenges with formative assessment during remote teaching. One explained that when the evidence of learning is mostly in the form of a virtual submission, “I can never tell what has happened to produce that piece of work when I wasn’t looking” (E9). An important element of formative assessment in the early years is observing learning as it occurs. One educator explained that “I’m missing that in class seeing how they’re doing, responding to their work immediately, and reflecting how I would approach it or flexing how I am describing it” (E6). The inability to observe and engage in the process of student learning was prominent across educators. Evidence of the learning process (e.g., photos) was useful to educators, with one sharing “what works is when the parents are taking videos and photos and sending it in. That way we can be more aware of what is happening” (E16). Likewise, another educator shared “if I get a video of a kid doing something, I feel that the assessments a little bit different for me because I can see some of their process” (E23). Many educators shared the sentiment that photos and videos help with understanding the learning process (E24; E17).

Educators provided feedback to families as a means of both assessing and engaging with the students. One educator explained that “I see my role as noticing and naming the learning that is happening. When they submit a photograph, I write them back with feedback, ‘I notice that you’re doing X’. I try to make that visible for families. I give anecdotal comments and give them ideas for extensions” (E10). Another educator shared that they provided feedback as a means of keeping the students engaged, explaining that the feedback is “very compassionate, very positive, you know, it might sound something like ‘oh I’m so proud of all the hard work you’re doing this week in your learning. You really learned a lot about penguins this week’” (E18). Although there was concern for how feedback may be received, educators recognized the importance of feedback in the learning process for children in the early years, one educator sharing that “I’m not going to add stress, but I will continue to give comments and feedback when things are submitted” (E10). Educators explained that this feedback process was their main way of assessing, stating that “in terms of kindergarten I’m not really assessing any of their work, what I’m doing is I’m providing as much feedback as possible” (E15). Similarly, Educator 6 said that their assessment is “kind of like feedback in that type of way, I’m not necessarily sure I even really call it assessment.”

Educators took on a form of loose summative assessment to keep track of student progress. One educator explained that they tracked to prepare for the return to in-person learning, “tracking is really important, so if schools do open . . . I might have a clearer idea of where my learners are in their learning” (E3). Another educator explained that tracking was done to help prepare for the eventual transition to a new educator, explaining that they were “trying to have some information on hand so when we know who has those kids next year I can kind of pass along what they’re doing” (E2). One educator shared that tracking would be useful for the families and teachers “maybe adding in whatever we can, that would be helpful for the family and the next year’s teacher” (E24). Thus, for the purposes of ensuring student progress, some educators engaged in summative assessment practices.

Suggestions for Future

The final theme surfaced from participants’ responses related to changes that they would like to see in the future. These suggestions were grouped into two categories: (1) continuation of remote teaching and learning and (2) transition to in-person learning.

Continuation of Remote Teaching and Learning

Educators and parents provided three recommendations for the continuation of the Learn at Home initiative: (1) *educators should focus on their mental health*, (2) *administration and educators should prepare long-term sustainable plans*, and (3) *there is a need to build rapport among educators and parents*.

A Focus on Mental Health Recognizing the overwhelming stress experienced by educators, they recommended a focus on mental health. With the growing uncertainty of delivering education remotely, one educator emphasized “just be easy on yourself . . . be aware of your own, you know that mindfulness piece. . . just be mindful of what’s happening with you. And then take care of that” (E20). Similarly, another educator explained the importance of taking care of oneself for the benefit of the children, sharing “if I could give any advice, just be there, the best you can for your kids, and your colleagues too” (E11). The sentiment of engaging in more self-care was reflected across many educators (E6; E11; E17). In comparing the turbulence of the shift to remote teaching and learning, one educator shared that they “this came out like a human cannon ball. . . we need to slow down” (E25); this metaphor is apt for underlining the unprecedented situation of teaching remotely.

Long-Term Sustainability The parents and educators in this research heavily discussed the need for long-term protocols to be put in place to ensure sustainability. One parent recommended that administration invest in developing a long-term

remote teaching platform because “even if all that happens and then our kids are back in the school full time 5 days a week, I guarantee you that the platform is not lost. It can be used in the schools, and it can be used on snow days. . .” (P9). This need for a long-term plan was shared among other parents (P8; P10) and educators (E6; E23). Parents also expressed that the sharing of long-range plans would help with planning, “have the collections so we can chunk it out our own way and what makes sense for our family every week” (P5). With shared long-range plans, parents could better understand the expectations and support their child’s learning (P3; P4; P5; P6; P7; P8; E24), with one parent explaining that “knowing what the online expectations are . . . at the beginning of the school year and they’re setting the foundation and we don’t know how long it will last. What, what actions do we need to follow through on to make sure our students are progressing accordingly” (P7).

Rapport Among Educators and Parents With the integral role parents play in the early years catalyzed by the COVID-19 pandemic, educators recognized that it was crucial that parents were directly involved in the remote teaching and learning of their children. One educator shared, explaining “You have to have all three involved, and all three, you know, rowing this boat in the same direction or it doesn’t work” (E25). This metaphor is a fitting comparison, as it reflects the Ontario Kindergarten program’s emphasis on relationships. Many educators suggested holding meetings with parents. One educator shared their experience in holding Google meetings with parents, explaining “I had the parents come on, and we just talked . . . they said, ‘aww thank God, like other people are experiencing what I’m experiencing’ you know?” (E25), noting that this was an opportunity for parents to bond over this shared experience. It is important that families feel involved in this process, and that means connecting authentically with educators. Another educator recommended to “drop your guard a little with the parents. Yes, you must maintain professionalism, but I have been very open with the parents” (E9). Educators in this study recommended taking advantage of this opportunity to connect with families.

Transition to In-Person Learning

Educators and parents provided two recommendations for the transition back to in-person learning: (1) *a need for administrative guidance and support*, and (2) *educators should focus on student-centered teaching and learning*.

Administrative Guidance

To feel comfortable sending their children back to school, parents needed assurance that there would be policies in place to ensure the school environment was safe. One parent shared “I hope that schools are vigilant with their illness policies and making

sure that kids are safe, and you know there are cleanliness guidelines” (P11). This concern was also held by educators, with one educator explaining “I personally will need the reassurance that I will be safe in the school . . . I have low immunity” (E21). Further, parents and educators expressed a desire for professional development to assist them in delivering a quality remote learning experience if online learning needed to be sustained or returned to in the future. For instance, one educator explained ““what can I do to address certain questions that children will ask me?” . . . so to have some PD on how to support students’ curiosity and navigate through this . . . I would love some guidance on that cause I have, I’m not really prepared for it” (E21).

Student-Centered Teaching and Learning

In discussing the transition back to in-person learning, a teacher shared, “it is our job as teachers in September to meet them where they are, where they need to be, and we will get them to be where they need to be. . .” (E10). This sentiment was shared by others (E6; E8; E17). Recognizing the need for students to continue receiving their education amidst an unpredictable pandemic, parents and educators recommended that the emotional well-being of students be considered. By focusing on building connections and creating a safe environment “I think that creates the environment for kids to be able to learn well” (P9). A student-centered classroom which meets every child where they are is essential to supporting learning. Creating routines is another way to do this; one educator shared that “the defining thing about success is: ‘do they get stability eventually?’” (E9). The recommendation to focus on routine for the students was shared across many (P8; P9; E20).

Discussion and Implications

This research sought to capture the unique experiences and perspectives of early primary educators and families as they transitioned to remote teaching and learning. This research was guided by two objectives: (1) to investigate how early primary educators (kindergarten to Grade 2) planned, taught, and assessed learning remotely, and (2) to examine the impact of this move to remote teaching and learning on teachers, early primary children, and parents. A summary and discussion of the themes is presented below.

The emergent thematic analysis revealed five themes: parent involvement, role of educators and administration, curriculum and pedagogy, focus on formative assessment, and suggestions for the future. In general, the experiences captured in this research revealed that early primary educators and parents were dedicated to supporting the learning of early primary students amidst the global pandemic. In

regard to parent involvement educators and parents discussed the multiple challenges and duties of parents and a high variability of involvement.

Educators emphasized the need to provide parents and families with flexibility given the multiple responsibilities that they are having to manage at home (i.e., work, care, and education). The majority of families believed that educators were aware of the increasing demands they had placed on them and that educators offered flexibility in how they supported their children's learning. The frequency and extent of parent involvement was dependent on the comfort level of the families. Results suggested that it was mothers who took on the responsibility of supporting the learning of their children. This finding is consistent with the work of Staniscuaski et al. (2020) who found that stay-at-home orders exacerbated challenges faced by working mothers. Similarly, Brown et al. (2020) highlighted the need for better supports for mothers in particular, as they take on more of the household and familiar duties, regardless of socioeconomic privilege, both before (Bianchi et al., 2012) and during the pandemic.

Given the additional demands on families, and mothers in particular, it was unsurprising that educator participants reported difficulty with communicating with some families. The results of this study suggest that more work is needed to support all families, particularly those who have been more severely impacted by the pandemic (i.e., job loss, low socio-economic privilege, English language learners). The families that were most easy to reach were those who were already actively involved in their child's learning prior to the pandemic. The pandemic served to exacerbate parent involvement differences and potential inequities for children. A limitation of this work is that it failed to capture the experiences of those families who had additional challenges in supporting their children's needs. Although recruitment efforts were put in place to access a diverse sample of parents, it is not surprising that those with additional challenges did not enroll in the study. With that being said, the educators in this study were able to provide a snapshot into the experiences of diverse families. Findings of this work are in keeping with emerging literature suggesting that COVID-19 has disproportionately impacted BIPOC communities, families with low socioeconomic privilege, and those with underlying health conditions (Ebor et al., 2020; Fortuna et al., 2020; Lee et al., 2021). Our work extends on this research by revealing the implications of varying parental involvement on children's learning. Educators need additional support to ensure they can access all parents and maintain ongoing communication with families. This is of course further challenged by the resources that families have. Many families across the world were not able to access remote education due to a variety of factors (Lee et al., 2021; Nunez et al., 2020). In the United States, for example, 14.5 million households did not have access to computers or the internet, resulting in students not having any access to remote learning (Institute for Children, Poverty, & Homelessness, 2020).

Similar to discussions of parent involvement, many participants discussed the ever-changing roles of educators and administrators. When parents discussed the role of educators many shared how understanding and flexible the educators were. Parents shared that they were impressed with how quickly the educators transitioned

to the delivery of remote teaching and recognized the effort that educators were putting into supporting the learning of their children. The educators experienced increased pressure to rapidly cultivate new skills to support the learning of their early primary students in a remote context. Conversations focused on additional educator roles including updating websites and Google classroom platforms as well as maintaining relationships and ensuring all students had access to the learning. These findings suggest that the role of educators has shifted to be facilitators during the COVID-19 pandemic. In discussing the delivery of curriculum, the educators emphasized how appreciative they were of the support that they received from administrators. The educators discussed the helpfulness of having educational administrators contact families who had been difficult to reach. Overall, the results suggest that educators were appreciative of the support that they received from administrators, and the parents were appreciative that educators rose to the challenge in supporting their children's learning.

The pandemic created opportunities for educators to develop new skills to overcome the challenges of remote learning (Pokhrel & Chhetri, 2021; Timmons et al., 2020). Doucet et al. (2020) revealed that the pandemic created incomparable opportunities for cooperation amongst teachers, innovative solutions to teaching challenges, and a desire to learn from colleagues and to integrate new tools into their practice. Moving forward, it is important to highlight the unanticipated educational benefits and to consider the ways the changes to teaching and learning may impact educational practices in the future. Overall, the move to remote teaching and learning provided opportunities for educators to engage in innovative practices in ways they would not have had exposure to in a typical classroom (Pokhrel & Chhetri, 2021), particularly in the early primary years (Timmons et al., 2020).

Despite the unanticipated benefits to the changing role of educators, it is important to also acknowledge that in our study, not all families were pleased with the implementation of remote teaching and learning. There were concerns from a few parents that some educators were more interested in making remote learning look so poorly that they were only doing the bare minimum. However, most parents reported that educators were facilitators of the learning process and provided ongoing support to parents and students.

In building on conversations focused on the need to rapidly cultivate new skills, educators discussed needing to adapt curriculum and pedagogy in a limited time. When discussing curriculum and pedagogy, participants discussed the ways in which the curriculum and pedagogical approaches typical of learning in early primary contexts needed to be modified. Discussions focused on changes educators had to make to their planning and organization of lessons and activities, and difficulties with offering asynchronous and synchronous learning opportunities. In discussing changes to planning, most educators shared that planning was more demanding now and had completely shifted from the emergent child-centered planning approaches they used when teaching in person. Educators not only had to plan further in advance for teaching, but they also had to plan for another adult, the parents, to deliver the programming. This was new to early primary educators who are trained to offer a child-centered emergent play-based program that evolves based

on children's interests (Timmons et al., 2020; OME, 2016; Pang & Simoncelli-Bulak, 2017). Overall, educators struggled with modifying their play-based activities for remote delivery although they attempted to use familiar activities to facilitate student learning. Additional professional development is needed to support early primary educators with integrating practices of play- and inquiry-based learning in remote teaching contexts.

In keeping with challenges associated with offering play-based learning, educators were challenged with how to authentically assess learning. Assessment in the early primary years typically focuses on the documentation of learning in the form of running records, anecdotal notes, and documentation panels to capture the learning process (OME, 2016). The educators in this study shared that it was impossible to collect authentic evidence of learning in a remote context. However, the educators worked to provide feedback to students and families to engage with the students in both synchronous and asynchronous learning tasks. The provision of feedback to families may increase parent involvement and could facilitate greater understanding of the learning process. More work is needed to support early primary educators with finding innovative ways to engage in formative assessment practices in remote teaching contexts (Timmons et al., 2020).

The final theme that emerged from the data focused on suggestions for the future. Educators and parents offered recommendations for both the continuation of remote learning and the return to in-person teaching. Educators and parents provided three suggestions for the continuation of remote learning: (1) educators should focus on their mental health, (2) administration and educators should prepare long-term sustainable plans, and (3) there is a need to build rapport among educators and parents. The concerns related to the well-being of early childhood educators are well documented in a recent study conducted by Bigras et al. (2021). More specifically, they highlight the challenges with having to adjust teaching practices for a prolonged period. They called for strategies to help support well-being and mental health for early childhood educators. In a different study, Eadie et al. (2021) showcased the importance of supporting early childhood educators' well-being to retain educators and ensure healthy relationships between educators and their students.

In addition, educators and parents provided two recommendations for the transition back to in-person learning: (1) a need for administrative guidance and support, and (2) educators should focus on student-centered teaching and learning. The recommendations shared by educators and parents in this study are in keeping with our earlier work that provided ten explicit recommendations for how to improve remote teaching and learning and in-person learning in the COVID-19 and post COVID-19 era (see Timmons et al., 2020).

Strengths and Limitations

Given the unique challenges associated with moving early primary education into a remote learning context, this research offers important insights into the challenges experienced by educators, parents, and students. The strength of this research is

captured within the two research objectives: (1) to investigate how early primary educators planned, taught, and assessed learning remotely and (2) to examine the impact of this move to remote teaching and learning on teachers, early primary children, and their parents. An additional strength of this study is the research design. The emergent thematic approach (Patton, 2015) allowed our research team to tell the stories and perspectives of the educators and parents while they were experiencing dramatic shifts in their work and home lives. In doing so we were able to capture their recommendations for the improvement of remote learning contexts. Understanding these perspectives is particularly important as it is possible that remote teaching and learning will be resumed or will need to be returned to in the future and their stories and recommendations can be used to improve remote learning contexts for students, parents, and educators. Despite the strengths, it is also important to address the limitations of this work. Data collection employed a qualitative interview with a small sample of educators and parents in Ontario, Canada. As such, this work is limited in its capacity to capture a large sample of geographically diverse participants. Moving forward, research should seek to capture larger samples of participants in geographically diverse locations. A key contribution of this research was that it captured the voices of early primary educators and parents as they navigated uncharted territory and transitioned to remote teaching and learning amidst a global pandemic. This research presents the unique challenges associated with remote teaching and learning in early primary contexts. Researchers, policymakers, and Ministries of Education should use this research to better understand and address the global education crisis while mitigating the educational challenges for those who matter most—the students, parents, and educators.

Conclusion

In conclusion, this paper showcases how the COVID-19 pandemic and rapid shift to remote teaching and learning impacted early childhood education. Parents' and teachers' perspectives were shared using interviews. Despite the evident disruption, it is notable that teachers and families adapted and dealt with very difficult circumstances. The consequences remain to be seen and will need to be examined in the future. However, one can posit that there may need to be additional professional development for teachers. Further, families may have additional resilience as a result of this disruption. Lastly, there is the potential for loss of learning for students. Therefore, examining the consequences of remote teaching and learning is a necessary area for future research. Similarly, there is a need to examine the transition back to in-person learning from both student and teacher perspectives.

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Chapter 22

COVID-19 Influences on the Quality of Curriculum in Selected Childcare Centres in Singapore



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The World Health Organisation on 12th March 2020, declared a global pandemic and countries struggled to contain COVID-19 infections (World Health Organisation, 2020). Policymakers and educators were confronted with challenges commencing in late March of 2020 as many countries' schools and early childhood settings were closed. According to UNESCO 'one in five learners were kept out of school' in an 'uncharted territory' (2020) and 'over 100 countries have implemented nationwide closures, impacting over half of world's student population' (2021). Recently, UNICEF (2021) also reported on this educational crisis by highlighting that, for more than 168 million children worldwide, schools had been closed for almost a full year during the period 2020–2021.

This period has also been a time of uncertainty and change especially for children and their parents. In the United Kingdom, for example, schools and early childhood settings were closed for most of 2020 (Lee & Bhopal, 2021). Parents who were deemed essential workers had education and care provision available for their children, but this was a small proportion of the total population of 67.1 million people in the United Kingdom (Department of Education, 2021; Office for National Statistics UK, 2020). Turning to Asia and the Pacific region, Park et al. (2020) also proposed that the unprecedented school closure and economic downturn perpetuated the vicious cycle of learning poverty. In light of the COVID-19 pandemic, many

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governments in Asia and the Pacific region are actively providing both financial and technical supports for early childhood education (ECE) centre/preschool, ECE staff and parents/caregivers to ensure the continuity of children's learning.

In Singapore, there are two major types of early childhood settings: kindergartens and childcare centres. Most kindergartens provide 3–4 h of educational and care programmes for children aged 2–6 years, while childcare centres provide long day (up to 12 h) educational and care programmes for children aged 2 months to 6 years. In 2019, there was a total of 1532 childcare centres, and 629 of them also offered infant care services specifically for children aged 2–18 months by qualified teaching staff (Early Childhood Development Agency, 2020a, e). The study reported in this chapter was situated in infant care services within the childcare centres.

A recurring question worldwide throughout the pandemic has been *what are the adverse effects on children's well-being and their learning as a result of the impact of changed learning environments?* This question was one that early childhood educators in Singapore also were very concerned with. This study reports on part of a larger, three-year follow-through study that set out to measure children's outcomes including their well-being. Ethics approval was obtained from the management committee of a large child care organisation including the ethics committee in 2019 to collect data across 20 selected early childhood centres under the organisation in Singapore. Since 2015 these centres have been implementing a curriculum that integrated a relationships-based approach with primary caregiving practices for infants and toddlers (Ebbeck et al., 2018). While the larger study aimed to investigate the effectiveness of the curriculum with young children (birth to three years), the focus here was directed to the effects of COVID-19 on the development of infants and toddlers, specifically: (1) children's levels of well-being before and during the pandemic in 2019–2020, and (2) educators' (principals and teachers) views on the opportunities and challenges of working with infants/toddlers during an unprecedented disruptive period while trying to maintain a relationships-based curriculum with a main focus on children's well-being.

Background

This literature review is organised into three sections. The first section provides an overview of the COVID-19 context in Singapore. The second section focuses on definitions of well-being in early childhood education. The third section addresses the opportunities and challenges of working with infants and toddlers during COVID-19.

The Singapore Context and COVID-19

Singapore, as part of the Pan Pacific Region, was no exception to the extreme danger of the pandemic. The Singapore Government moved quickly to set up a Multi-Ministry Task Force (Ministry of Health, 2020) that put measures into operation that would protect the population as much as possible. The government recognised that children who received early education and care services within group settings and the professionals who consistently work with these children faced significant risks (Goh, 2021). During April and May in 2020 early childhood settings were closed except where they provided services for the children of essential workers (Early Childhood Development Agency, 2020b). The Singaporean government's response is documented fully by Abdullah and Kim (Abdullah & Kim, 2020).

Being an island city-state, Singapore had a relatively small population of 5.7 million people in 2020 (Singapore Department of Statistics, 2020). The government hoped that by closing early childhood centres and installing other community closures and restrictions the virus could be contained. However, there were unique challenges because Singapore is highly urbanised, with most families living in close proximity to one another in high-rise buildings. In addition, many early childhood programmes are situated in government housing estates (Government of Singapore, 2021) where such settings are usually located on the ground floor (i.e. void deck) of these public residential precincts (Choo, 2010). In these settings, outdoor play space is open to the community and is not fenced in. Community members can be in close proximity to the play area (Ebbeck et al., 2019). Likewise, indoor space can often be limited, especially within early childhood settings located in government housing estates (Yim & Lee, 2016).

The Early Childhood Development Agency (ECDA) began issuing Press Release Advisories to the local community in Singapore from early 2020 (2020d). These advisories were entitled 'Precautionary Measures' giving advice to parents, educators and principals about temperature screening and health checks, directions about ensuring good personal hygiene and ensuring good environmental hygiene. Travel declarations had to be submitted by staff and they were advised on 5 February 2020 to avoid all non-essential travel to Mainland China. These advisories releases continued throughout 2020 and into 2021.

Educators (including principals and teachers) in most schools and early childhood settings in Singapore were required, at very short notice, to provide home-based learning tasks for all levels of schooling and early childhood education, including infants/toddlers (Government of Singapore, 2020). The provision of home-based learning tasks was a new requirement and, given the urgency of the situation, there was little or no time for training on the development of these home-based learning materials. Such development was a new skill that teachers had to respond to. Educators were expected to develop age-appropriate materials which were to be accessible to parents so that they could assist their children's learning. Many educators had to adapt to the online teaching platforms used by their educational settings while, at the same time, they tried to manage their heavy personal stressors and professional workloads (Tong & Yip, 2021).

The suspension of in situ early childhood education and care services for families in Singapore was very challenging as more than half of local married couples (52%) were dual-career couples (Department of Statistics, 2020) and two-child families remain the local norm (Department of Statistics, 2021). Home-based learning created demands, particularly on women who tend to have the main child-rearing role in Singapore. As Jalongo (2021) comments ‘the suspension of childcare services due to isolation measures exacted its highest toll on families who were already struggling. These families are most likely to experience severe, long term effects’ (p. 766). Contrary to Singapore being praised by the global authorities as the most fully vaccinated country in the world (ABC/Reuters, 2021) and with the lowest death rate (Rajendran, 2020), the pandemic was viewed by the local community in 2020 as a seriously challenging and unprecedented period that necessitated full cooperation to limit transmission of the virus.

Children’s Well-Being

The COVID-19 pandemic has focussed the attention of educators on the continuing well-being of children (Coller & Webber, 2020; Gassman-Pines et al., 2020). Parents, educators, health professionals and policymakers have been concerned that the pandemic may have resulted in negative long-term effects on children (Dudovitz et al., 2021). It has been recognised that, in order to develop optimally, a positive sense of well-being is central to children’s development (Hyson & Tomlinson, 2014). Laevers, Moons, and Declercq (as cited in Laevers & Declercq, 2018) define well-being as ‘a state in which one feels at ease, shows spontaneity, is self-confident and enjoys its presence and interactions with others’ (p. 326). Well-being also includes respect for self and others and a sense of interdependence or likeness (Winter, 2003).

Within this chapter, well-being is defined as ‘a way of considering an overall state of being that might be measured using a range of indicators that are basically content specific’ (Garvis & Pendergast, 2017, p. 6). This definition can be interpreted as ‘a complex physical and psychological state comprising good physical health and feelings of happiness, satisfaction, and social functioning’ (Ebbeck et al., 2015, p. 233). Well-being is demonstrated through one’s interactions with the environment, and young children’s well-being has clear links with external conditions. These interrelated elements can be seen as part of the overall well-being of a child (Department for Children Schools and Families (DCSF), 2008; Department of Education Training and Employment, 2008).

Well-being and relationships are fundamental to the holistic development of children of all ages. In the context of COVID-19, it becomes more challenging to maintain positive relationships between teachers and children in a range of contexts when face-to-face interaction is no longer possible for sustained periods of time.

Opportunities and Challenges of Working with Infants/Toddlers During COVID-19

Taking note of Laever and colleagues' comments about interactions, COVID-19 has created discontinuities that may have interrupted the development of being connected. Many educators have written of the importance of continuity of care (e.g. Lally & Mangione, 2017). Developing trust and attachment is particularly important for infants and toddlers and occurs when continuity of care exists. Ebbeck et al. (2021) have stated that continuity between home and centre is always important for the age group of birth to three years and a primary caregiving approach facilitates educators in Singapore to establish close, reciprocal relationships with children and families. This approach enables the beliefs and child-rearing aspirations of diverse ethnic families to be integrated into the curriculum. Researchers (e.g. Lally, 2010; Lally & Mangione, 2017) also consistently emphasise that relationships and trust are primary to children's development, and such emphasis has been supported by many other early childhood scholars (Degotardi & Pearson, 2016; Dolby, 2007; Honig, 2002).

Continuity/connectiveness in learning has been interrupted by COVID-19. The problem of 'disconnection of children from their peers at school informal play activities, organised sports and visits to one another's homes' (Jalongo, 2021, p. 765) was strongly apparent in the lives of young children and families in Singapore. Local educators grappled with the question of how to support children's learning and to provide some continuity of their learning in the face of school/centres closures and when they reopened in a phased manner in 2020. Knowing about the responses of educators (i.e. principals and teachers) in the COVID-19 situations, then, is extremely important – particularly for those who work with the vulnerable, younger age group of infants and toddlers.

Methodology

The design of the study was based on a mixed methods approach (Creswell & Creswell, 2018). Such an approach was selected primarily for its capability to combine quantitative and qualitative data collected within the research study (Onwuegbuzie & Leech, 2005). This combination aims to provide a more complete understanding of the research focus by drawing on the strength of each type of data.

Sample and Sampling Technique

After ethics approval was granted, parents/caregivers in the 20 selected childcare centres were invited to participate voluntarily in the study by returning a third-party informed consent for their child's participation in the study. Using purposeful

sampling (Creswell & Creswell, 2018), centres were selected from each of the five regions of the country as demarcated by the Singapore Urban Redevelopment Authority, namely Central, East, North, North East and West. All involved centres had the primary caregiving system in place for at least 5 years. A total of 113 infant/toddlers' (aged 2–18 months) participated in this study in both 2019 and 2020.

This study used purposeful sampling (McMurray et al., 2004) to recruit principals and teachers across the same 20 childcare centres. Based on their availability and willingness, seven principals (response rate 35%) voluntarily participated in an individual semi-structured interview, and a total of 14 principals (response rate 70%) and 60 teachers (response rate 70%) returned the anonymous survey.

Instruments

A standardised Wellbeing Scale (based on the work of Laevers, 1997; Mayr & Ulich, 1999) was used to measure children's levels of well-being. The scale required six 5-min observations of each child over a 6-h period. The scale includes three main domains, namely, (1) happiness and satisfaction, (2) social functioning and (3) dispositions (Department of Education Training and Employment, 2008). Data were collected by using a 5-points scale, and the score of each item was added up to obtain the overall mean score (out of 20 in this study). This scale has been used extensively in Singapore (e.g. Ebbeck et al., 2014, 2018) and in many overseas countries (e.g. Fonsén et al., 2020; Sando, 2019). In Australia, the Wellbeing Scale was also recommended as one of the key resources to support the implementation of the national curriculum (Department of Education Employment and Workplace Relations (DEEWR), 2009, p. 2).

An anonymous survey and an interview schedule were designed by three researchers and reviewed by a fourth researcher in the project team as part of the larger study, with alignment to the curriculum practices and classroom routines of the 20 selected early childhood settings. Both instruments aimed to collect principals' and teachers' perceived views on opportunities and challenges of working with infants/toddlers during the COVID-19 period in 2020. Due to the focus of this chapter, dichotomous responses (yes–no) from principals and teachers to the 12 statements on the survey and interview data related to the chapter focus were reported.

Data Collection and Data Analysis

A total of 113 infant/toddlers' (aged 2–18 months) levels of well-being were assessed at two points of data collection (i.e. one in mid-2019 and one in mid-2020) by using the Wellbeing Scale (based on the work of Laevers, 1997; Mayr & Ulich, 1999). Observations were non-participatory and were conducted by the same research team members.

Principals and teachers were invited to return the hard-copy surveys to a collection box in the reception counter of each centre within a period of two weeks. Individual face-to-face interview was conducted in the English language (an official language in Singapore) by the research team members in participants' workplaces. All interviews were digitally audio-taped and transcribed by the researcher team. Data obtained were classified anonymously.

Quantitative data were analysed by using the statistical package for the social science (SPSS) version 26.0 software. Qualitative responses to interviews were entered and analysed by using the QSR NVivo version 12.0 software. Data were coded according to the emerging themes. Responses to each theme had keywords selected and those with similar keywords and ideas were given the same code.

Findings

This section presents findings from both quantitative and qualitative data analysis. Findings show children's different levels of well-being before and during the COVID-19 period and reveal educators' expressed views on opportunities and challenges of working with infants/toddlers during the pandemic.

Children's Well-Being

Results for children's well-being showed that children's overall mean levels of well-being were high both in 2019 and 2020. Figure 22.1 shows that the same cohort of children in 2020 scored higher during the pandemic in 2020 than they did in 2019 before the pandemic. A paired sample *t*-test revealed that the difference between children's overall mean level of well-being in 2020 ($N = 113$, $M = 16.8$, $SD = 2.2$) and the level in 2019 ($N = 113$, $M = 11.4$, $SD = 1.7$), $t(112) = -20.1$, $p < 0.01$ was significant.

Educators' Opportunities and Challenges of Working with Infants/Toddlers During COVID-19

A total of 14 principals (response rate 70%) and 60 teachers (response rate 70 %) returned the survey. Most principals ($n = 8$, 57%) have a degree qualification and nearly half of them ($n = 9$, 43%) were aged under 39 years. The majority of teacher-participants had a minimum of diploma qualification ($n = 43$, 72%) that met the government requirements (Early Childhood Development Agency, 2021). Most of them ($n = 45$, 75%) were aged under 39 years. Almost all principals ($n = 11$, 79%)

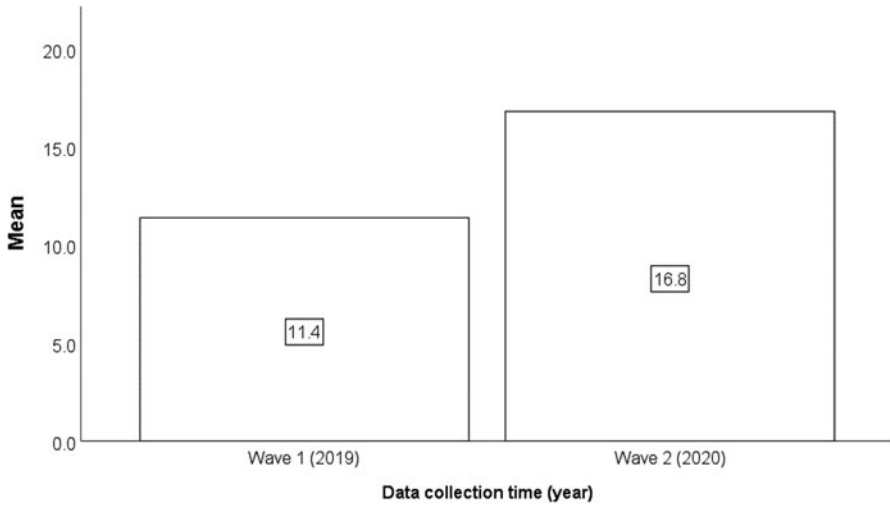


Fig 22.1 Children's levels of well-being in 2019 and in 2020

and teachers ($n = 50$, 83%, 2 missing data) had worked in their current early childhood settings for at least two years, which meant that they had experiences in the same workplace, children and families before and during the pandemic.

Qualitative Themes

Another research dimension reported in this chapter was the data gathered through follow-up interviews with respondents to verify data. Seven principals voluntarily agreed to discuss in more detail the policies of the organisation and how this impacted on the work of their centre. Selected interview responses during the pandemic in 2020 are presented to triangulate the survey data.

Opportunities

Figures 22.2 and 22.3 illustrate the top three opportunities perceived by the principals and teachers via the survey. All principals ($n = 14$, 100%) and teachers ($n = 60$, 100%) agreed that the crisis improved their sense and skills of teamwork, which may be due to the need for all team members to work together to minimise infection and to respond to unprecedented external and internal pressures. Principals ($n = 12$, 86%) and teachers ($n = 60$, 100%) also agreed consistently that the pandemic triggered the development of new technological skills. Such positive outcomes during the pandemic were highlighted by principals and teachers during interviews as well. One principal also shared an interesting but heart-warming point about



Fig. 22.2 Top three opportunities of working with infants/toddlers during COVID-19 perceived by principals (*n* = 14)

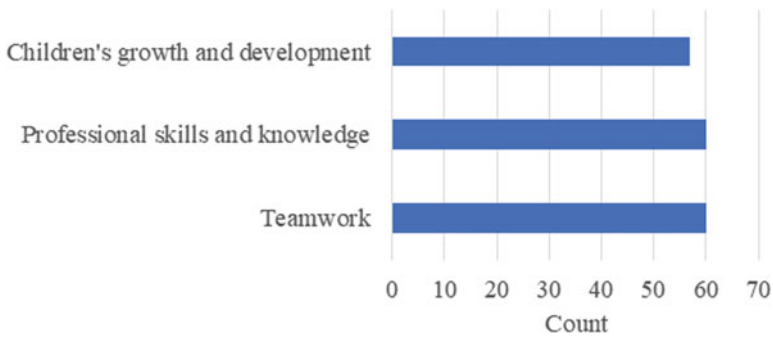


Fig. 22.3 Top three opportunities of working with infants/toddlers during COVID-19 perceived by teachers (*n* = 60)

parents’ awareness and appreciation of teachers’ work during the pandemic. The following are some sample excerpts to illustrate principals and teachers’ views on opportunities:

- ‘We worked as a team very closely to minimize infection’ (teacher)
- ‘We engaged more with on-line teaching’ (principal)
- ‘We learned new skills as a centre team’ (principal)
- ‘The biggest positive outcome during COVID, we learned online IT skills’ (teacher)
- ‘I learned how to use zoom for lessons’ (teacher)
- ‘During the circuit breaker period, many parents realised the importance of our work. They appreciated us and said this’ (principal)

Challenges

Figures 22.4 and 22.5 illustrate the top three challenges perceived by the principals and teachers. Principals (*n* = 14, 100%) and teachers (*n* = 54, 90%) consistently agreed that the government guidelines and policies presented challenges to them.

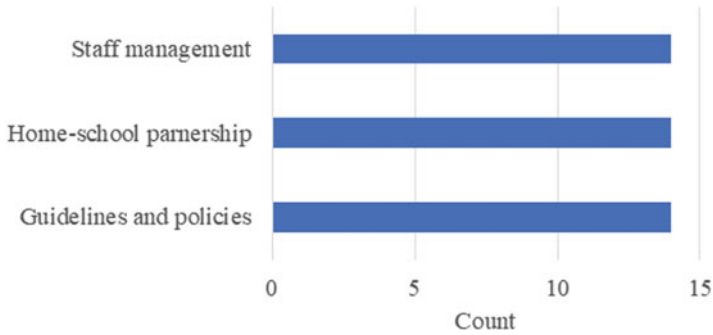


Fig. 22.4 Top three challenges of working with infants/toddlers during COVID-19 perceived by principals ($n = 14$)

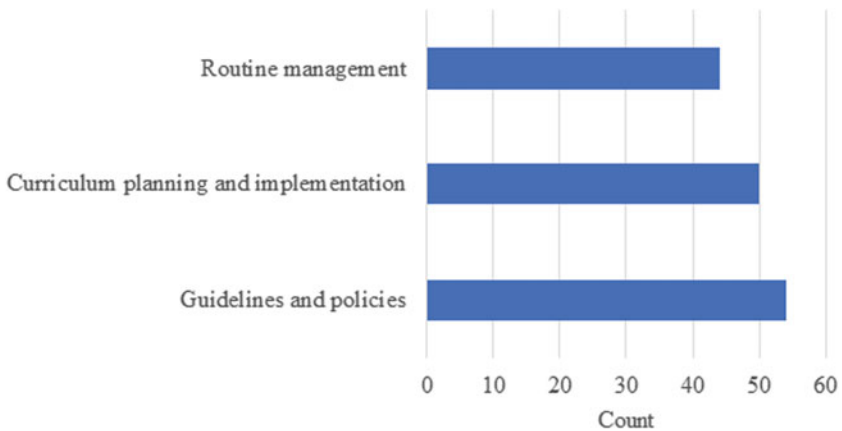


Fig. 22.5 Top three challenges of working with infants/toddlers during COVID-19 perceived by teachers ($n = 60$)

Such findings may have been due to the necessary strict health/hygiene procedures, social distancing rules, the implementation of home-based learning within a short notice and the everchanging school/centre closure and reopening times and strategies. All principals ($n = 14$, 100%) also indicated the challenges and high workload of communicating updated information to parents and the challenges of managing staff manpower across classrooms/settings due to the deployment restrictions. Teachers commented on the challenges of resource/activity arrangement for infants/toddlers based on children's developmental needs (e.g. toy selection, outdoor play) ($n = 50$, 83%) and the implementation of routines (e.g. bathing, meal time) ($n = 44$, 73%). Such challenges were also consistently highlighted by principals and teachers during the interviews. The following are some sample excerpts to illustrate principals and teachers' views on challenges:

- 'The increase in workload (e.g., video recording/zoom sessions) has greatly affected my mental wellbeing as it caused me to experience anxiety' (teacher)
- 'This COVID situation is a challenge for teachers' energy – mental and physical' (teacher)
- 'Some children were not able to sleep during their nap. Many children don't like to put on masks. So, when we ask them to put on a mask, they struggle with it, take it off or throw it on the floor' (teacher)
- 'Even though we have markers on the floor. The toddlers are not really accepting of this. They like to mingle and share with their friends' (teacher)
- 'We need to understand the needs of children based on their age and developmental levels. They want to play with and be close to others. They want to hold their peers' hands and hug their friends' (teacher)
- 'There are limitations on activities we can do during outdoor time with restrictions on places to walk. . .the children being so young, require constant reminders from the teachers' (teacher)
- 'Parents who have rigid working hours say that it is difficult to manage working from home and going on-line with their children' (principal)
- 'It's quite challenging. There are some days when teachers need to take leave and there are staffing gaps. We need to find someone to cover them and it can be difficult' (principal)
- 'Manpower issues or staff shortages – It's very difficult and challenging. As it is our centre manpower is very lean and then when the restrictions came out that teachers cannot cross bay (i.e., play corners) or cross classrooms' (principal)
- 'We have to be realistic in the expectation of placing infants/toddlers in small groups and practicing physical distancing. As we practice an inclusive preschool, we need to also ensure that we have enough staff to look after the different groups as each group has to be two metres apart' (principal)

Discussion and Implications

In this section, a thorough discussion of major findings is presented. Results highlight the importance of trust and secure attachment to support children's well-being. Also, findings show that support for teachers' personal and professional needs during the everchanging period are important.

Assessing Children's Well-Being

The findings on children's well-being may be explained by the quality of the relationships-based curriculum adopted in the 20 selected centres as it was designed based on the attachment theory (e.g. Bowlby, 1969; Dolby, 2007) that views trust as the basis of development in infants and toddlers, and one's well-being improves with trust. In addition, in the curriculum, there is a sustained focus on establishing and maintaining reciprocal and positive relationships between educators and children by integrating a primary caregiving approach (Bernhardt, 2000) into the system. The approach aims to foster a continuity of learning and has also been viewed as a foundation of high-quality education and care services for young children. Relationships are considered as being critical for the child's current and continuing

development across the 20 centres in the study (Ebbeck et al., 2021). Early childhood professionals in Singapore have also a very strong reputation as advocates for high quality education and care services for young children (Hujala et al., 2016). It is proposed that infants/toddlers' high levels of well-being in the present study can be attributed to a strong sense of attachment, which has been developed through the sustained primary caregiving system and the relationship-based environment that has endured despite the COVID-19 requirements and discontinuities experienced.

Educators' Concerns

In the year 2020 in Singapore, there was a serious discontinuity with the normal provision of education and care services for children and their families. When children returned to centres in mid/late 2020, the strict requirements established during COVID-19 continued to be in place and required in 2021. In addition to implementing COVID-19 practices, centre staff were required to grapple with new government policies and procedures for centre self-accreditation that added to staff anxiety.

Maintaining One's Own Well-Being as a Teacher

As mentioned previously, both teachers and children were at risk of COVID-19 infection. In 2020, science research institutes throughout the world engaged in finding a vaccine to combat the virus. However, so much was unknown about the virus and early childhood professionals were thrust into a situation of considerable uncertainty and the responsibility for keeping their classes of children COVID safe became an essential service to their community. Some teachers experienced pandemic-induced stress (Gromada et al., 2020), as they were challenged to provide a classroom environment that was substantially different from their pre-COVID classroom environments. Being COVID safe, educators were in highly stressful situations, and many faced difficulties in coping with additional requirements and personal commitments, especially if they had to juggle their own home environments and responsibilities with those of their workplace. Such a feeling was confirmed by Jalongo (2021) who said that she 'worried about how future caregivers and teachers would meet professional standards and licensure criteria' (p. 763). Eadie et al. (2021) also consistently confirmed that 'the global pandemic has resulted in increased demands on early childhood educators' (p. 910). The community also must acknowledge the challenges of motivating early childhood educators during the pandemic and support the education professionals as the 'most valuable asset' in the community (Dabrowski, 2020).

Physical and Socio-emotional Support

Safety and hygiene guidelines and implementation of policies were strictly adhered to in order to minimise infection and applied to children, teachers and to all other staff working in centres. These guidelines/policies aimed to protect one's physical health. However, children's social and emotional well-being were important too. The sense of secure attachment that the 20 centres in the present study developed in children from infancy provided an excellent base upon which their safety and independence were enhanced during the everchanging period.

Mask Wearing

In Singapore, toddlers aged 2 years and above have been required by ECDA to wear masks (Early Childhood Development Agency, 2020c). Teachers reported that some toddlers accepted this procedure after some frustration and the added process of keeping masks hygienic was time-consuming. However, the viewing and interpreting of facial expression is an integral skill when gauging the social and emotional development of children.

Physical Distancing

Physical distancing became a most important COVID restriction for all ages in the community. However, it proved to be more difficult for toddlers to adapt to. During toddlerhood, when children begin to identify with friends and be able to sit with them became a problem for teaching staff. For young children, physical distancing was usually done by placing large markers on the floor. Children were required always to sit on a marked place. Because of physical distancing, the activities provided for the children were 'controlled' in that children were not always given free choice. Teachers often had to restrict the number of activities on offer due to class size and space. Therefore, it was important for professionals to provide on-site and virtual opportunities for children (and themselves) to develop and rebuild the connectedness (Vukovic, 2020).

Sensory Learning and Outdoor Play

During the pandemic, the cleaning of toys and equipment had to be increased so this became an extra duty required of staff in the early childhood settings in Singapore. Soft toys were removed as the cleaning of these was difficult. In most countries,

beyond Singapore, empty playgrounds were commonly seen and children's outdoor time was reduced. Lack of outdoor play opportunities and sensory learning can adversely affect the overall development of growing children. Teachers in this present study reported that the lack of opportunity to play outdoors was felt by some toddlers who showed frustration and indeed found it difficult to sleep during rest periods. It is accepted that outdoor play is important for children's eye health (Aldrich, 2016) and its importance for Singapore cannot be understated as it has one of the highest prevailing rates of myopia (or near-sightedness) in the world (Health Promotion Board, 2018). Researchers across the globe have also raised serious concerns about diminished eyesight due to home-based e-learning (Heung, 2021; Wong et al., 2020). Early childhood professionals in Singapore may thus embed the '20–20 rule' into their teaching works and personal life – that is every 20 min one should take a 20-s break looking at least 20 feet away (Battiste, 2021).

Role of Parents in Home-Based Learning

Principals and teachers in the present study reported that many parents had difficulty with assisting their children to complete the home-based learning activities. Parents in Singapore are generally expected to follow through supervising their children with a range of activities, including those for infants/toddlers. However, most local parents have their own work requirements to complete and so finding a balance in their lives is not easy. Gromada et al. (2020) commented that many parents struggle anyway to balance responsibilities of child care and paid employment and the impact of COVID-19 has created an even greater challenge for parents. Like some other Asian countries, Singapore is a merit-oriented society. The fact that schooling and early childhood settings being closed worried many parents as they were concerned about the perceived loss of learning opportunities (Baker, 2021). However, as aptly put by Jalongo (2021), 'families soon realised that teachers and caregivers of young children have to do more than meet vast basic needs, provide structure and routine and offer learning activities' (p. 771). Parents, on the whole, are encouraged to trust the educators' professionalism, while supporting their children to establish routines and to create an environment conducive to learning.

Strengths and Limitations

The strengths of the current study include the recruitment of 20 centres across five regions of the country and the use of a validated instrument. Also studies of well-being in infants and toddlers are rare, particularly in the Pan Pacific Region. The sample size of 113 is considerable and has shown significant outcomes in the analysis. The study provides a database that other researchers can build on.

The limitations include a relatively small sample of teachers and principals. Given this, the generalisability of results to professionals working with very young children is cautioned. Further, findings from this research study reflect the state of children and early childhood professionals under one large non-profit making organisation. But the impacts of the COVID-19 pandemic may be different in other settings because funding and resources differ across settings.

Conclusion

The information gained from the sample of participants in a study presented in this chapter has given unique insights into how principals and teachers survived the challenging and uncertain times of the COVID-19 pandemic in Singapore. As this chapter is written, sadly the global crisis is not yet over, and the world is having to learn and adapt as challenges persist and new challenges appear. The lessons learned from surviving in such a difficult time show the commitment and professionalism of early childhood educators who have long learned to persist and to work with parents and the communities in which they are based. The principals and teachers in this research study have benefited from the training prior to the pandemic and are strong proponents of their curriculum that has a strong focus on relationships, integrating a primary caregiving approach based on attachment theory. In spite of the pandemic restrictions, educators across the 20 selected centres in Singapore continued to implement a quality curriculum. What is interesting with this sample of infants and toddlers is that secure bonds with the significant others in their lives appear to have supported these children in developing the resilience necessary to adapt to the challenges associated with the COVID-19 pandemic.

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Chapter 23

Educational Services for Young Children with Disabilities During COVID-19: A Synthesis of Emergent Literature



Elizabeth A. Steed 

Globally, there are approximately 53 million children 5 years of age and younger who have a developmental disability (Olusanya et al., 2018). Young children with disabilities are disadvantaged when compared to children without disabilities, as they have less access to educational services and are at increased risk of abuse, stigma, social exclusion, and discrimination (UNICEF, 2020). The COVID-19 pandemic underscored an/d exacerbated access to educational services and other inequities for young children with disabilities and their families. This chapter will explore the impact of COVID-19 on the educational services provided to young children with disabilities. Resources included in this chapter were found by searching 28 library databases using ProQuest with search terms such as “children with disabilities and COVID-19” and “early childhood intervention and COVID-19.” The available pandemic-related research is synthesized pertaining to children with disabilities regarding: (1) special education services provided to children with disabilities during COVID-19, (2) perceptions of families with children with disabilities regarding the educational services and supports they received, (3) early childhood personnel’s challenges providing remote learning to children with disabilities, and (4) innovative aspects of educational service delivery for children with disabilities during COVID-19. This chapter ends with a discussion of key considerations and recommendations for integrating technology into early childhood instruction and adapting instruction to be inclusive for all young children.

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Special Education Services and COVID-19

The global response to the COVID-19 pandemic involved public health measures, including school and early childhood program closures, and a disruption in special education services for young children with disabilities. While the effectiveness of closing of schools to curb the pandemic is debated (Viner et al., 2020), the detrimental impact on children's academic trajectories is clear, especially for vulnerable children such as children with disabilities (Kuhfeld & Tarasawa, 2020). School closures jeopardized other aspects of young children's healthy development, including access to meals, social opportunities with same-aged peers, and the loss of in-person therapy services for young children with disabilities.

Multiple agencies regulate and fund early childhood intervention programs globally. Variances in program oversight as well as changing guidance for how to provide educational services during school closures and virus mitigation approaches negatively impacted young children with disabilities (Steed & Leech, 2021). In the United States, for example, approximately 40% of American families reported that they did not receive special education services for their child during the early months of the pandemic (Masonbrink & Hurley, 2020). The number of children with disabilities stopping therapeutic services was higher in France, with 52–73% of children stopping physiotherapy and occupational therapy (Cacioppo et al., 2021). There were reports of a significant number of children with disabilities in Africa not receiving special educational services, especially during lockdown orders (Mbazzi et al., 2020). Children in countries such as Turkey received educational services, such as remote instruction delivered over television that were not individualized to their unique needs (Tekin-Iftar et al., 2021). Globally, emerging research suggests that special education services were modified, reduced, or not delivered due to the country's response to COVID-19 (Yakut, 2021).

Across continents, some young children with disabilities received modified special education services through remote instruction or telehealth services during COVID-19. Some early childhood personnel maintained communication with families through email, phone calls, and messaging applications (Tarrant & Nagasawa, 2020). Teachers and related service personnel, such as speech and language pathologists, physical therapists, and early childhood interventionists, attempted to continue services for young children through web-based learning systems and exchanging videos with families (Dayal & Tiko, 2020). Some early childhood programs relied on Zoom to conduct class meetings, whole group instruction, and communicate with families (Szente, 2020). In the United States, approximately 14% of families used their phones to access remote educational services for their children with disabilities (Regame Laboratory, 2021). Telephone contact was utilized more frequently in some countries, as many families did not have devices or sufficient internet to access online instruction (UNESCO, 2020). For instance, reports during the pandemic in India called for alternative methods to remote instruction for children with disabilities, given inequitable access to devices and internet in the country (Narvekar, 2020). Professionals globally raised concerns about educational

disruptions exacerbating inequalities between advantaged and disadvantaged children (Kim et al., 2021). The delivery of paper-based educational materials to children's homes was utilized to address inequitable access to remote educational services in some countries (Dayal & Tiko, 2020; Kang et al., 2020).

Remote special education services relied heavily on parents for implementation of the special education interventions usually received in person from teachers, early interventionists, or related service personnel (Asbury et al., 2021). While professionals and families attempted to collaborate to provide remote special education, there were several barriers to their effective utilization. First, some families were not in a position to provide special education services to their children at home due to their work and other caregiving demands, their lack of confidence or competence in implementing the interventions, or a lack of access to the required equipment; this was especially the case for young children with significant disabilities who utilized adaptive or therapeutic equipment that was left in school buildings during the spring of 2020 (Warren-Richter & Lloyd, 2020). Second, adaptations and play-based therapeutic approaches may have been difficult to replicate in online settings with young children with disabilities (Warner-Richter & Lloyd, 2020). Third, there was a lack of online platforms that were compatible with assistive technology used for teaching children with visual impairments or those who are hard-of-hearing (Patel, 2020).

In general, research across countries indicates that the intensity of special education services was highly variable for children with disabilities and their families and less frequent or intense than pre-pandemic services (Jeste et al., 2020). One study conducted in the United States found that early childhood personnel who worked with children with disabilities devoted three or more hours during the early months of the pandemic communicating with families and just 1 h providing instruction to children (Steed & Leech, 2021). In the Netherlands, survey findings indicated wide variability in the therapies that continued during the country's response to the pandemic, with some essential therapies continuing while others were deemed less critical (Aalsem et al., 2020). In Uganda, some therapeutic services were considered essential during pandemic lockdowns; however, children and families who relied on public transportation often could not access the in-person therapeutic services that were open (Mbazzi et al., 2020). Korean parents reported that they did not have sufficient remote support given the significance of their child's disability (Kang et al., 2020). A global survey of parents with children with disabilities indicated that most families experienced a loss of at least some educational or health care services during COVID-19; only 56% continued with special education services online (Jeste et al., 2020). Many families reported needing more services and support than what they received during the pandemic (Cacioppo et al., 2021; Jeste et al., 2020).

The decrease in the quantity of special education services children received during COVID-19 is likely to have negative long-term impacts on their development and family functioning. The reduction in special education services is especially problematic for young children with disabilities, given the critical window for intervention in the early childhood years (National Institute of Child Health and Human Development, 2017). In addition, many countries noted the suspension or

delay of diagnostic evaluations which may result in lower numbers of young children receiving early intervention for delays and disabilities (Centers for Disease Control and Prevention, 2020; Eapen et al., 2021).

Families' Perceptions of Services and Supports During COVID-19

Families with children with disabilities noted variable satisfaction with special education services received during COVID-19 lockdown months (Toseeb et al., 2020). A US survey of 207 parents of children with disabilities reported overall low satisfaction with their children's special education and therapeutic services during the COVID-19 pandemic (Murphy et al., 2021). Satisfaction was lowest among families who were receiving remote therapeutic services as opposed to in-person services (Regame Laboratory, 2021). A global study indicated that families perceived remote special education services as helpful, but that they would have been more effective with one-on-one videoconference sessions and aides in the home (Jeste et al., 2020). These research studies reveal inconsistencies and inequity in access to high-quality special education and therapeutic services during the pandemic. For example, children with disabilities who are also economically vulnerable and/or culturally and linguistically diverse were especially negatively affected by school closures (Harris et al., 2021). Further, children with more significant disabilities, such as intellectual disabilities, received less support from a variety of sources during COVID-19 (Willner et al., 2020).

The loss of services and school closures negatively impacted the mental health of families with children with disabilities (Asbury et al., 2021; Rogers et al., 2021). While the global pandemic negatively impacted everyone, families with children with disabilities were more stressed than the general population during COVID-19 (Asbury et al., 2021; Neece et al., 2020). Being tasked with meeting their children's developmental needs on top of caring for their children's physical and health needs was an additional stressor, on top of adjusting to lockdown orders, health and safety concerns, and the economic impacts of the pandemic (Murphy et al., 2021). As one study of migrant families in the Netherlands indicated, the biggest stress for many families of children with disabilities was providing care full time to their children at home because of school closures (Geuijen et al., 2021). Parents of children with disabilities in Palestine reported exhaustion and decreased living standards due to the increased caregiving burden (Zahaika et al., 2021). One study in the UK found that families with children with intellectual disabilities had significantly greater levels of a wish fulfilment coping style, defeat, anxiety, and depression during COVID-19 when compared to families with children without disabilities; differences in mental health levels were 2–3 times greater than levels reported in pre-pandemic studies (Willner et al., 2020). One study found that American parents' psychological distress was exacerbated by decreased opportunities for self-care during lockdown orders

(Iovino et al., 2021). Parents in France, Spain, and Italy worried about their children's emotional and behavioral state during the pandemic, suggesting parent-child interdependence during the adjustment to changes brought on by the pandemic (Cacioppo et al., 2021; Orgilés et al., 2020).

A small subset of surveyed parents in the UK reported that COVID-19 had little impact on their mental health or had improved (Toseeb et al., 2020). Other studies confirmed that some families of children with disabilities experienced unanticipated positive aspects of the pandemic (Neece et al., 2020; Rogers et al., 2021). For instance, a culturally and linguistically diverse sample of parents of young children with intellectual disabilities in the United States reported that they experienced stronger family ties from the increased time at home during COVID-19 (Neece et al., 2020). Parents in the UK noted that the elimination of daily pressures, such as getting ready for school, had eliminated many of their children's challenging behaviors (Rogers et al., 2021). It is important to note that some children with disabilities were happier, learning well at home, and enjoying spending more time with family during the pandemic.

Early Childhood Personnel's Challenges During COVID-19

Emerging research indicates that early childhood personnel experienced various personal, emotional, and work-related challenges during COVID-19 (Park et al., 2021). Teachers who work with young children with disabilities are used to supporting families adjust to their child's disability and to manage life transitions, such as divorce or a family move. Early childhood interventionists and other related service personnel were tasked in the early months of the pandemic with supporting all children and their families with a difficult transition, while they were navigating the same life disruption. Much of the global research on the impact of the pandemic on early childhood personnel has documented personal, emotional, and work-related stresses for educators who worked in childcare, preschool, and kindergarten settings (Bassock et al., 2020; Crawford et al., 2021; Pramling Samuelsson et al., 2021). Emerging research that included teachers and interventionists who worked with children with disabilities documented that they were extra stressed, worried about their health and safety, and feeling socially isolated due to school closures and lockdown orders (Steed & Leech, 2021). Financial hardships were experienced by early educators in countries with more school and program closures (Pramling Samuelsson et al., 2021). While data are not currently available regarding the impact of the pandemic on the finances of early childhood interventionists globally, financial stress is a persistent problem across the early childhood workforce due to low pay and a lack of health insurance and paid leave (Ali et al., 2021).

A second challenge for early childhood personnel was the emotional strain of the pandemic. Early childhood teachers were challenged to take care of themselves while also supporting their students, the children's families, and their own children and family members. For example, a qualitative study of early childhood teachers in

Australia revealed that educators were worried about their personal health and safety, finances, and how children were developing and coping during the lockdown (Dayal & Tiko, 2020). Early childhood personnel in the United States reported struggles to manage taking care of their partner's needs, their children's remote learning, and logging in for work meetings, sessions with children, and communicating with families (Steed & Leech, 2021). Early childhood teachers in Brazil and elsewhere were challenged by increased demands at home (Malta Campos & Vieira, 2021; Jalongo, 2021). Mid-career teachers were most challenged, as they often had their own children at home and struggled to meet their work and parenting demands (Kraft & Simon, 2020).

The third challenge for early childhood personnel that led to increased stress during COVID-19 was an increased workload and different approach to their work for which they were not adequately prepared. Many early childhood personnel were quickly told to shift to remote learning in the spring of 2020 but did not have adequate training to set up learning systems and provide robust remote learning to young children and their families. In the United States, early childhood special education (ECSE) teachers were more likely to have received some rapid training in the use of remote learning approaches than early childhood education teachers (Steed & Leech, 2021). It is possible that ECSE teachers were more likely to be offered training or to seek out training, due to their role in meeting their students' Individual Education Programs (IEPs). Reports from Brazil reiterated a lack of preparation for teaching children remotely when schools and programs closed (Malta Campos & Vieira, 2021). Overall, early childhood personnel globally received minimal training, especially in the pedagogical and developmentally appropriate use of learning technology with young children (UNICEF, 2020). Early childhood personnel were unprepared to use technology in their instruction. Early childhood educators do not frequently use technology in their classrooms, due to a value on play-based approaches and concerns about the negative impact of screen-time on young children (Plowman et al., 2011). Further, many early childhood personnel worried about the negative impact and utility of remote learning for young children with disabilities (Steed & Leech, 2021).

Difficulties engaging in remote learning persisted into the fall of 2020 for many early childhood personnel, as some countries continued school closures or offered remote options to children and families during partial school re-opening. When early childhood programs in Korea returned to in-person learning, some teachers were responsible for providing both in-person learning and remote instruction to a group of children continuing to learn at home (Park et al., 2021). The demand to teach both in-person and remotely placed a logistical and psychological burden on early educators, with early educators in the United States reporting mental and physical exhaustion (Crawford et al., 2021). New health and safety procedures associated with in-person instruction, such as wearing masks, documentation, cleaning, and monitoring children's handwashing, challenged early childhood educators globally and added to early childhood personnel's workload and stress (Park et al., 2021).

Early childhood personnel who worked with children with disabilities were already at heightened risk for high work-related stress and burnout (Paquette &

Rieg, 2016). Special educators experience high stress due to the complexity of their jobs, sometimes needing to support children with challenging behaviors and dealing with a high degree of uncertainty about whether or not their instructional efforts will result in positive outcomes (Langher et al., 2017). The COVID-19 pandemic introduced an increased and prolonged uncertainty as educators utilized new models for providing educational and therapeutic supports to children, did not know how those methods would be received by children and families, and did not know when or how they would go back to teaching in person (Crawford et al., 2021). Enduring feelings of uncertainty, confusion, and difficulty maintaining work–life balance issues may plague early childhood personnel (Kim et al., 2020).

Innovations During COVID-19

While COVID-19 presented educators globally with unprecedented challenges, there were innovative aspects of educational service delivery for young children with disabilities during COVID-19. If early childhood intervention systems embrace lessons learned, it is possible that new, effective, and more equitable ways of providing educational and therapeutic services to children with disabilities and their families could become part of common practice. First, remote services provided to families at home, in some cases, improved the relationships between early childhood personnel and families of children with disabilities (Steed et al., 2021). Classroom-based early childhood special education teachers and related services personnel described using more family-centered approaches when they switched to remote services, including allowing families to choose how they received services and focusing on what families needed at home (Steed & Leech, 2021). Another study found that Spanish-speaking families in the United States reported more authentic relationships with early childhood professionals during COVID-19 (Soltero-González & Gillanders, 2021). The family-centered practices that emerged during COVID-19 represented commonly recommended practices for family partnerships in early childhood settings; however, early educators and families appeared to have experienced them differently from pre-pandemic partnerships. The pandemic may have provided a context in which family involvement was so necessary that classroom-based early educators integrated more family-centered practices into their approach. Other professionals, such as physical therapists, also appeared to shift from a medical model of telehealth to a more family-focused approach when they had to rely on families for implementation of interventions at home on a large scale during COVID-19 (Rao, 2021).

A second innovation of COVID-19 was the creative use of remote educational services to children with disabilities and their families. The use of online educational programming, phone calls, and home-delivered learning packets sustained children's learning and maintained an emotional connection between children and their teachers and peers (Dayal & Tiko, 2020; Kang et al., 2020). While many early childhood teachers struggled initially to utilize play-based approaches virtually,

educators increasingly became inventive regarding the use of videos and delivery of hands-on materials (Edelman, 2020). Remote instruction addressed typical intervention barriers such as personnel shortages, difficulties reaching families in rural locations, transportation issues and time for both personnel and families, and the need to serve children with disabilities with compromised health conditions (Murphy et al., 2021). Studies of teacher and clinician perspectives indicate that they hope some elements of virtual educational and therapeutic services for children with disabilities will continue in a post-pandemic world (Camden & Silva, 2021). Remote instruction can enhance access, timeliness, and quality of care by supporting uniform implementation of best practices, processes, and protocols (Eapen et al. 2021). It can also save costs, including travel time and be a more efficient use of health professionals' time and skills (Goldstein et al., 2017). Many early childhood personnel, by the fall of 2020, reported improved confidence and effectiveness in using remote approaches to support young children's learning at home (Crawford et al., 2021). Research indicates benefits of virtual service delivery, including the ease of team meetings on videoconference platforms.

While remote educational and therapeutic services have the potential for increased access and equity for children with disabilities and their families, COVID-19 also revealed technological barriers that could decrease this access, especially for families without technology devices, reliable internet, or sufficient cell phone minutes to engage in remote opportunities (UNESCO, 2020). Another barrier for early childhood providers globally was the lack of insurance coverage for remote-provided special education services or therapies (Camden & Silva, 2021). More work needs to be done with the Medicaid/Children's Health Insurance Programs (CHIP) and with other third-party insurers to reduce barriers and increase access to remote services as an option for children with disabilities and their families (Goldschmidt, 2020). If those steps are taken, the pandemic may result in a paradigm shift in how laws and insurance reimbursement occur for remote therapy services, resulting in more widespread use of the approach for children with disabilities and their families.

Considerations and Recommendations

Early childhood systems of service delivery should consider how to keep the innovations and positive outcomes of the pandemic, including the use of family-centered approaches and utilization of remote services for some situation. There are additional considerations for policymakers and early childhood leaders as in-person educational services resume. A first key consideration moving forward is the need for comprehensive and inclusive disaster plans that include guidance for supporting young children with disabilities. In the United States, some school districts did not include details for how to provide remote learning for children with disabilities during the spring of 2020 (Reich et al., 2020). Children with disabilities and their families may have unique needs. For example, families with children with

disabilities may have specific support needs (e.g., loaned therapeutic equipment), increased stress due to a loss in services and caretaking demands at home, or particular worries about COVID-19 exposure due to their child's disability and health (Warner-Richter & Lloyd, 2020). Families of children with significant disabilities may benefit from options for some in-person classroom experiences and/or home visitation (Blagg et al., 2020) or one-on-one videoconference or in-home aide support (Jeste et al., 2020). Early childhood personnel who work with children with disabilities may have unique professional needs in terms of equipment needed, online software that will work for children with disabilities, and guidance for when and how interdisciplinary teams should meet and provide services and evaluations during a disaster.

Disaster plans should include specific guidance for reopening that includes input from children with disabilities and their families. For instance, some families with children with disabilities may want to continue some remote learning or therapy sessions. Early childhood personnel may benefit from guidance in a reopening plan about how to assess children with disabilities for learning loss, how to support children's adjustment to new health rules and classroom routines, and how to adjust previously decided goals and intervention targets (Flack et al., 2020). For those children with disabilities and their parents who noted learning and mental health improvements during the pandemic school closure, there are important lessons about the stress those children had been under while in school; these issues should be explored further so that children with disabilities can be better supported when they return to school.

A second consideration is the ongoing technology needs for teachers and families to support young children with disabilities. Research indicates that early childhood personnel and families continue to grapple with insufficient devices, spotty internet, online platforms that were not designed for children with disabilities, and a lack of training in remote pedagogical approaches for young children with disabilities (Crawford et al., 2021; Steed & Leech, 2021). Early childhood personnel would benefit from guidance on using learning materials for hands-on activities at home, sharing resources with families, how to utilize family-provided videos effectively for coaching, and how to do these activities in a culturally responsive way and in multiple languages (Flack et al., 2020). Support for early childhood personnel should also include training in how to address social emotional goals virtually, integrating assistive technology into remote learning, and using online progress monitoring tools to measure children's progress educational or therapeutic goals (Patel, 2020; Warren-Richter & Lloyd, 2020). Personnel who participate in the referral and eligibility determination process may also need support in conducting online assessments, such as those used during initial evaluations for early intervention or pre-school special education (Centers for Disease Control and Prevention, 2020). Ongoing technology training for early childhood personnel will need to attend to teachers' attitudes about using technology, their knowledge and skills in using technology, and their integration of new knowledge into practice (Chen & Chang, 2006).

A third consideration is the need for targeted mental health support for children with disabilities and their families (Aishworiya & Kang, 2021; Toseeb et al., 2020). Early childhood personnel should receive training in trauma-informed practices so they can adjust their classroom routines and approaches for children and families who may have experienced trauma and/or loss during the pandemic (Flack et al., 2020). There is a need to also support professionals' mental health needs, as early childhood personnel providing educational services to children with disabilities during COVID-19 were highly stressed and without necessary supports for their increased workload (Battistin et al., 2021). This stress was layered on top of continuing workforce issues such as low compensation and a lack of health insurance (Adams et al., 2021). Various short- and long-term policies need to be put in place to support the early childhood workforce, including increasing the number of mental health providers available and making their services accessible to all. Early childhood personnel would benefit from other supports as well, such as childcare for their own children (Adams et al., 2021).

The ongoing COVID-19 pandemic is unmatched in its global scale and the implications it has for children across the world, including young children with disabilities. Reinforcements will be needed to supply early childhood systems with what they need to deliver high-quality educational and therapeutic supports to children with disabilities, training and technology for early childhood personnel, and mental health supports for children, families, and personnel. This is an opportunity to address longstanding issues with inequitable access to early intervention, and inclusive early childhood education for children with disabilities. Addressing the challenges that emerged during the pandemic, continuing the innovations, and considering the unique needs of children with disabilities will result in more equitable and high-quality early childhood programming for all children.

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Chapter 24

Music Programs for Young Children During the COVID-19 Pandemic: Stories from Across the World



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Music is regarded as one of the key learning areas for young children. Educational researchers, policymakers, and curriculum designers around the world concur that young children should be provided with quality music education from the earliest stages of their development (Campbell & Scott-Kassner, 2019). Music is an integral part of the cultural heritage of societies, which makes music education relevant in its own right (Young & Ilari, 2019). Moreover, it is well known that music engagement

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enhances children's sensory, cognitive, emotional, and motor skills, which are the driving forces behind all learning (Williams, 2018), and that music provides children with multiple benefits such as improved motivation and self-esteem, problem-solving, decision making, autonomy, self- and cultural awareness, and appreciation of diversity (Ilari, 2016). For these reasons, contemporary early childhood curriculum frameworks encourage teachers to implement musical activities daily.

However, the disruptions caused by the COVID-19 pandemic have affected the provision of education and services geared toward young children and families. Early childhood music programs, which are usually offered in daycares, preschools, and community spaces like museums and arts/specialized schools, were affected by the pandemic. While some programs were shut down, others were able to migrate to online formats and outdoor offerings (where allowed).

In this chapter, we offer snapshots of early childhood music education provision in Kenya, Brazil, Hong Kong, South Korea, New Zealand, and the United States during the pandemic. Teachers, researchers, and program directors share stories of adaptation, ingenuity and resilience that are framed by cultural beliefs and practices and by responses to the pandemic at local and national levels. While each account is contextually bound and framed by the positionality of individual authors, there are some common themes that cut across the reports. At the end of this chapter, we present these emergent and overlapping themes along with implications for early childhood music education.

Responses by Early Childhood Music Educators Around the World

This section describes the perspectives adopted in four geographically distant and culturally diverse jurisdictions, specifically Aotearoa New Zealand, Kenya, Hong Kong, and South Korea. Each sub-section provides a brief context of early childhood music education in the region at hand, analyzes the impact of COVID-19, describes the main decisions affecting music education, explores the main challenges associated with adaptation of programming due to the pandemic, shares the current status of programs, as well as short-term and long-term plans (if any).

Aotearoa New Zealand: Addressing Inequity of Access to Early Childhood Music Education

Early childhood music education in Aotearoa New Zealand is dependent on the expertise and enthusiasm of individuals and the location (rural/urban) and socio-economic status of families. Although early childhood education (ECE) is not compulsory, most children attend some form of ECE before they start school at

around 5 years of age (Ministry of Education [MoE], 2020). Early learning services are fully regulated and partially funded by the Ministry of Education. The ECE curriculum, *Te Whāriki* (MoE, 2017), is a holistic curriculum from which ECE providers are expected to develop their own local curriculum. Although *Te Whāriki* contains references to music supporting learning outcomes, there is no specific requirement to include music in ECE. In addition to the music offered within early learning services, early childhood music activities are offered through not-for-profit, church, or community organizations. Private ECE music classes tend to be limited to major cities. Private instrumental lessons are offered in most areas, although availability can be limited in smaller towns and rural areas. The first case of COVID-19 in New Zealand was reported on February 28, 2020. On March 19, the border was closed to everyone except citizens and permanent residents, and on March 26 the country was placed in a full-scale lockdown. During this lockdown, the entire population was required to self-isolate at home with only essential services allowed to operate. Restrictions were eased slightly beginning April 28. Schools and ECE services initially re-opened for the children of essential workers only, and fully re-opened on May 14. In August, a community outbreak led to further restrictions, including a 2-week closure of schools and ECE centers in Auckland, the country's largest city and home to one-third of the population. At the time of writing in December 2020, the borders remained closed to all, but a limited few, and new arrivals were required to spend 2 weeks in government-managed isolation. Due to these stringent measures, the COVID-19 virus was not active in the community and there were no restrictions on daily life.

During the pandemic, the response from music educators, musicians, and music organizations demonstrated a commitment to providing accessible music experiences for young children and their families. Music and the arts did not, however, feature strongly in the Ministry of Education's COVID response. When the lockdown was announced, the Ministry of Education moved quickly to provide support for schools and families, particularly those who did not have access to the Internet. This response included the launch of two free-to-air educational television channels, created as a joint initiative between the Ministry of Education, the Education Review Office, Te Kura (the correspondence school), and TVNZ (Television New Zealand) (Bunting, 2020). Broadcasts aimed at 5- to 8-year-olds covered literacy, math, science, movement and health, and a small amount of *te reo Māori* (Māori language). There was no programming relating specifically to the arts. The daily broadcasts included a short segment for preschool children hosted by early childhood teacher, actor, and musician Karen O'Leary. Karen incorporated singing in a way reflective of a holistic approach to early childhood education.

The ways in which ECE services connected with children and families during lockdown varied greatly. Although music was largely absent from the Ministry of Education's response, a survey of managers in the ECE sector shows that 57% reported including singing time in their online provision for children during lockdown (Mitchell et al., 2020). Private and community early childhood music

educators reported moving their teaching to an online setting. Many of these educators offered free sessions, motivated by a desire to help families cope with and reduce feelings of isolation. Some even took the opportunity presented by online provision to expand their programs to offer classes or short online posts every day (MENZA, 2020).

The two largest orchestras, the New Zealand Symphony Orchestra (NZSO) and the Auckland Philharmonia Orchestra (APO), included young children and families in their COVID-19 response. APO staff prepared two sets of online resources aimed at preschool and primary-aged children, which were posted to their website each week. *APO Make and Do* contained activities for children such as “Listen and Draw,” and “Make your own percussion instrument.” *APO and Whoa! Guide to the O!* was a series of short video interviews between APO musicians and a puppet, introducing children to the instruments of the orchestra (McKenzie, 2020; Auckland Philharmonia Orchestra, 2020).

The NZSO created *NZSO Storytime*, aimed specifically at young children. Composer Claire Cowan was commissioned to write incidental music to accompany four well-loved children’s picture books. The stories were read by well-known New Zealanders with accompanying music performed by a small ensemble of NZSO musicians. Four stories were recorded in July, when the musicians were allowed to rehearse together, but restrictions on public gatherings remained. A further story was recorded for *Te Wiki o te Reo Māori* (Māori language week) in September. The recordings were freely available via the NZSO’s website and YouTube channel. The success of *NZSO Storytime* as digital events encouraged the NZSO to perform the stories to live audiences after audience restrictions were lifted (L. Colominas personal communication December 7, 2020; New Zealand Symphony Orchestra, 2020).

The provision of early childhood music education is inequitable in Aotearoa New Zealand. Access to music education is not explicitly required within the early childhood curriculum framework and depends on the priorities and interests of ECE centers and their staff (Bodkin-Allen, 2009). The availability and accessibility of music education opportunities also varies in relation to how rural or urban a region is and the socio-economic status of the population. Although socio-economic barriers remain for children and families with no access to the Internet, providing music education experiences that can be accessed from children’s homes potentially removes barriers associated with location. For example, during and since lockdown, children residing outside the two largest cities, Auckland and Wellington, have had access to educational content produced by the APO and NZSO for the first time. One of the benefits of the COVID-19 lockdown has been the production of resources that remain available beyond the time of lockdown. There is potential for this to have a lasting impact on the ways organizations provide musical experiences for young children and their families, the ways children, families, and ECE centers access these experiences, and how ECE services develop music education programs.

Kenya: Pedagogical Adaptations for Online Early Childhood Music Learning

Kenya has an established ECE program and is believed to have the most robust infrastructure for ECE in Africa (Mbugua, 2004). From 1886 when the first recorded school for young children in Kenya was founded to the 1940s when more formal ECE began with different schools for Europeans, Asians, and Africans, today the Constitution provides for the right to early childhood education. Children in pre-schools range between the ages of 3 and 6 years.

Kenya is currently transitioning progressively from the previous national curriculum to a Competency Based Curriculum (CBC), now in operation between pre-school and Grade 4 levels. However, the national curricular guidelines for ECE music education previously referred to as *Music and Movement Activities* are largely in use in all public and most private preschools. Objectives include relaxation and enjoyment, appreciation of other cultures and international consciousness, creation of the child's own songs and movement, and early appreciation of music as a foundation for subsequent musical development (Kenya Institute of Education, 2003). Skills to be imparted include singing, dancing or movement, making rhythm, listening, and playing musical instruments (Andang'o & Mugo, 2007). Apart from the national CBC curriculum, some preschools offer international curricula and have their own music education curricula.

Between the ages of 6 and 8 years, Kenyan children attend lower primary school, now referred to as Grades 1–3, respectively. At this level, music falls within Movement and Creative Activities, along with art, craft, and physical education (KICD, 2017). Learners are to be equipped with basic knowledge, skills and attitudes that will enable them to express themselves in creative and healthy ways through experiential learning.

After the first reported case of COVID-19 on March 13, 2020, the Government of Kenya abruptly closed schools and colleges nationwide on March 15th as a containment measure. The closures affected 17 million learners, including all public and most private preschools. Since schools closed in Kenya, the ministry of education and other agencies indicated that learners should undertake online or technology-mediated learning on TV, radio, education-technology apps, and mobile phones (Parsitau & Jepkemei, 2020). This posed a challenge in rural areas where many homes lack electricity supply and Internet connectivity and have a limited supply of smartphones. Even in urban areas, however, there were challenges, especially regarding how learning outside of school could be organized without the physical presence of teachers. Most parents felt inadequate or did not have the time to supervise their children's learning.

In general, private schools offering international curricula have their own pre-schools or kindergartens. These schools also have comparatively better learning resources than public and most private schools offering only the national curriculum. For these schools, the necessary infrastructure for virtual learning was already in place and in use. Consequently, while all public and most private schools were shut

down completely, these institutions transitioned to virtual learning for the early childhood level. Transition periods varied between 2 and 3 weeks allowing for training of teachers on usage of online platforms.

Music education activities were varied, depending on the availability of learning resources and the teachers' level of training in music. Teachers with undergraduate degrees in music conducted more focused learning with activities such as rhythm play, use of action songs, singing along to pre-recorded music and explaining the elements of music to learners in both preschool/pre-primary and lower primary school levels. Most other teachers played songs accessed from YouTube, with children participating by singing along.

As preschool teachers adapted to teaching virtually, various challenges arose. Technology-related problems included teaching children how to operate devices to join and to exit lessons. Power outages and unstable Internet connections also interrupted learning. Pedagogical concerns included creating activities that children could follow while retaining their concentration for 30 or 40 minutes, coordinating playing of percussion instruments rhythmically and remotely assessing music learning outcomes. Some teachers opted for individually performed repertoire, avoiding group songs due to the challenge of synchronizing the singing and actions on screen.

With regard to psychological effects of school closures, feedback from music teachers indicated that “children do not understand the concept of COVID-19; . . . they can't understand why they cannot go to school; they are stressed and traumatized, which negatively impacts on their readiness and eagerness to learn (Teacher 1).” Regarding social concerns, some teachers had to deal with “the presence of a younger or older sibling who keeps on nudging them when they are doing their music lesson (Teacher 1).” A second teacher commented, “The parents in my school did not allow their children to have cameras on during music class sessions.” In this school, the teacher taught with his camera on, but could not see the children to ascertain how engaged they were in musical activities. Lack of physical contact with children also meant that teachers could not support children who needed extra attention in their music lessons.

As of January 2021, all schools in Kenya resumed face-to-face learning. Some preschools are planning to incorporate virtual learning in pedagogy as a long-term measure. Blended learning is now regarded as an ideal approach to early childhood music education. Many children are able to operate technological devices and to sing confidently after many repetitive singing lessons. One school which had no music room is now planning to build one.

The Kenya Private Schools Association (KPSA) has teamed up with one of the banks in the country to introduce a virtual learning initiative, *Masomo iendelee*, LiNDA MWALiMU (translating to: let learning continue, take care of the teacher). In partnership with an e-learning provider, EduVOD Africa, the aim is to activate online virtual schools, virtual content, virtual assessments, and teacher training, all for aiding holistic virtual learning (Okumu, 2020). The bank will provide support for teachers and learners to acquire laptops, tablets, and capital for schools to ensure they can operate without interruption. This initiative has the potential to benefit early childhood music education if harnessed by music education researchers and

practitioners in both public and private schools to develop learning content that can be accessed by more teachers, thereby making early childhood music education more accessible and inclusive.

Hong Kong: Minimal Attention to a Secondary Learning Area

In Hong Kong, the presence of music has recently increased in ECE settings as a result of licensing requirements and regulations. Currently, ECE teachers are required to reserve time for children to engage in music, arts, and physical education activities daily. The official kindergarten education curriculum guide—which is compulsory to all kindergartens and childcare centers receiving government subsidies (around 85% in the city)—includes music as a subdomain of the learning area *Arts and Creativity*. Kindergartens and childcare centers are required to provide daily music activities for children to achieve these objectives, including singing, music appreciation, responding to beats and rhythms with movement, exploring timbre and sound effects, or improvisation and creation with sound and body movements.

However, researchers have documented that music education practices in Hong Kong do not reflect these curriculum proposals. The primary focus is on singing routine and action songs, using music as a filler, as a classroom management tool, or as a vehicle for the learning of academic areas. Furthermore, educators are often observed teaching *about* musical concepts, generally using teacher-led instructional approaches, but rarely pose activities that involve free exploration, improvisation, or creation (Lau & Grieshaber, 2018).

Due to cultural factors and systemic pressures, Hong Kong parents strongly prioritize children's academic learning. Because ECE centers are privately run, parents feel entitled to decide how their children should be taught, often requiring didactic teaching and academically oriented curricula to prepare children for primary school (Bautista et al., 2020).

While music education plays a secondary role in Hong Kong, the city has many private centers that offer a variety of early childhood music programs. Tutors typically conduct individual and small group classes focusing on musical instruments, Chinese traditional music, voice, and music-and-movement programs for babies and children aged 6 to 36 months (e.g., *Kindermusik*, *Jingle Jangle*). In a highly pragmatic and competitive society, music education is used by many parents as a tool to help their children *race to the top*. Children are frequently pushed to learn music with the extrinsic motivation of succeeding in the local education system, particularly to be admitted to elite schools, where mastering several instruments is often required. Even if music is not of any personal interest to the child, many parents highly value and prioritize its cognitive and academic benefits as valuable educational outcomes.

Due to COVID-19, the Education Bureau (EDB) suspended face-to-face classes in all educational settings. Kindergartens, childcare centers, nurseries, and other private operators (e.g., music studios, tuition centers) were closed for approximately 6 months in 2020. There have been short periods of reopening, during which schools were only allowed to have face-to-face lessons on a half-day basis and with fewer children per classroom. While Hong Kong families were not quarantined at home, children's regular learning activities were drastically limited. Rules were equally strict for private businesses. Most music studios moved to smaller, in-person, or online classes. Due to the government restrictions to control the pandemic, these centers temporarily stopped taking on new students. At the time of writing, both center-based ECE programs and all extracurricular activities for young children had been suspended until mid-February 2021. During school closure periods, the EDB emphasized that primary and secondary schools should make good use of online learning. The government was quick to implement assistance programs to support low-income families in purchasing electronic devices and subsidize the cost of Internet subscriptions at home. However, online learning was not required in ECE settings, as the EDB recognized that young children's excessive screen time could be detrimental to their development (Lau & Lee, 2020).

Under these circumstances, the provision of music learning activities for children has been dramatically reduced. During periods of school reopening, educators have tried to minimize the level of physical interaction among children, avoiding activities such as singing, musical games, sharing music instruments, and free movement to ensure social distancing. In view of the situation, many schools have stopped engaging external music specialists, who prior to COVID-19 were employed to deliver music lessons on a part-time basis. Furthermore, existing partnerships between ECE centers and external music and art associations have also been interrupted. Extracurricular music programs previously offered in playgroups, community centers, tuition centers, and other public spaces (e.g., libraries, museums) have been shut down for the time being.

While measures have been taken to continue to foster children's learning during school closures, the focus on music education has been minimal. The EDB has produced Educational Multimedia (EMM) for students at all levels (from kindergarten to secondary), which have been provided for schools to enrich students' learning experiences. Freely available on EDB's website, these resources include theme-based videos on various subject matters. However, only a handful of EMM resources target music education for children. Most kindergartens, nurseries, and childcare centers have also proactively designed their own online teaching resources, mainly in the form of videos, which have been shared with parents via platforms such as Facebook, WhatsApp, YouTube, and Tik Tok. In the case of music, these videos mainly focused on songs, simple musical elements (e.g., rhythm, beat), and often featured teachers singing, playing instruments, or demonstrating action sounds in front of the camera and encouraging parents to follow with their children at home. As in regular classroom practices, videos intended to foster children's creativity and self-expression are lacking. Interestingly, there have been complaints among families that some music videos were entertainment-oriented and not directly related to curriculum goals.

The use of online learning resources has been non-compulsory, and parents could decide to complete the activities with children on their own discretion. A recent survey study found that Hong Kong kindergarten parents who were not offered online resources were dissatisfied with the school's approach to handle school closure, wishing to be provided with pre-recorded activities and lesson demonstrations tailor-made by the teachers, to sustain children's interest and attention (Lau & Lee, 2020).

In summary, music in Hong Kong is generally seen as a secondary learning area, and while many parents provide their children with rigorous musical training, their motivations are rarely intrinsic. These facts, together with the rigid control measures imposed by the government to prevent the spread of the pandemic, have resulted in an obvious lack of action to explore alternative ways to continue to deliver early childhood music education programs.

South Korea: Cultural Centers Adapt and Continue to Serve

In South Korea, parents and children can enroll in an early childhood music program offered at department store cultural centers, government-run community centers, or private learning centers. Notably, the early childhood music programs at the cultural centers have high enrollment because of their low tuition, convenient locations, and ample parking spaces. Department store chains across the country operate cultural centers that offer various programs (e.g., music, art, culinary arts, languages, and ballet) for all ages, and early childhood music programs are among these. Most early childhood music programs are 3-month courses, and parents and children participate in various music activities for 40 minutes once a week. In the classes, the children and parents sing songs, chant, move, play instruments, and interact musically.

As a neighboring country of China, Korea was one of the first countries to be hit by COVID-19. Since the spread of the virus in January 2020, the number of confirmed cases exploded in late February, the latter part of August, and early September. But instead of imposing a national lockdown, Korea's response to COVID-19 has been to prevent the spread of the virus while keeping the economy and society open to allow people to continue with their lives.

The cultural centers were shut down or discontinued for some programs starting in February until May 2020 and again from October until February 2021. The government-operated community centers migrated to online formats and finished their remaining spring semester, 2020. When the government eased the strict social distancing measure to a less strict measure on May 6, the Korean people returned to "distancing in daily life," maintaining social distancing while carrying on their daily activities. As a result, most cultural centers were reopened and parents enrolled their children in early childhood music programs at their discretion.

All cultural centers created COVID-19 safety protocols based on the Central Disease Control Headquarter guidelines and implemented these to continue offering the programs. The safety protocols required all visitors to check their temperatures,

sanitize their hands, and wear a mask (except for very young children) before entering the facility. Regarding the hygiene of the facilities, the staff disinfected the classrooms frequently, and some cultural centers placed air purifiers in the rooms. When the summer registration started, the music teachers lowered the maximum number for each class. Two teachers consulted during the writing for this chapter reported that there were no confirmed cases at the cultural centers during the in-person classes.

One of the main challenges that music teachers faced due to COVID-19 was their limitation in using a variety of musical instruments because the virus could be transmitted through the sharing of instruments. Because infants and toddlers put instruments in their mouths, one of the teachers encouraged parents to purchase a set of basic instruments or bring props that could replace the instruments. When instruments had to be distributed, the teachers avoided using the same set of instruments in the next class or asked parents to clean the surface of the instruments with baby wipes before returning them. To maintain social distancing in the classes, teachers did not include activities that required holding hands, moving together, or sitting close together in sharing an instrument or a prop. While such adaptations were imperative, the teachers commented that they resulted in a less dynamic music experience for children and parents. Both teachers expressed that singing with a mask on, not being able to see the children's facial expressions, and their limitations in terms of approaching the child for a musical interaction impacted their teaching experiences.

We know that singing is unsafe during the pandemic because the coronavirus is transmitted via aerosol particles. However, it was interesting to learn that teachers and parents were not worried about the potential transmission of the virus through singing. It is possible that the cultural centers' implementation of strict safety protocols and continuing with their daily life at various places (e.g., taking the subway and eating at restaurants) might have put them more at ease about this. Furthermore, as the numbers of confirmed cases decreased and the social distancing measures were relaxed during the summer, the fear of COVID-19 might have lessened.

Several challenges related to teaching online also emerged. Children often lost interest and focus and were distracted by the surroundings. Other challenges included not being able to hear other people's singing, unstable Internet connections, and the lack of instruments at home. Despite such difficulties, however, the teachers mitigated these issues by calling out children's names to keep their attention, using an interesting prop, such as a hand puppet, to encourage their participation, and using familiar repertoire. The teachers also helped parents make instruments using recycled materials and presented well-known Korean folksongs and children's songs that the parents could sing with and for their children. Therefore, in a virtual music classroom, the parents took on a more active role to facilitate their children's musical experiences, which was a tremendous help for the teachers.

In December 2020, the second-highest social distancing level in the five-tier COVID-19 alert system was again applied due to rising cases in the Seoul area until the end of January 2021. Because private gatherings of more than five people were prohibited, the cultural centers and community centers were closed. As the numbers of confirmed cases decreased and the reported deaths in Korea were not as

high as in China, the United States, or European countries, the cultural centers will likely open once the government eased the current social distancing measure after January. When this happens, the teachers speculate that as expected, the cultural centers will opt for in-person rather than online classes and reopened beginning March. Reasons for such a decision could be that Korean parents prefer in-person music classes because of the social and emotional benefits of early childhood music programs and the opportunity to explore instruments that are not accessible at home. One teacher noted that if the government reinstates strict social distancing measures persist, and the cultural centers remain closed, she will teach one-on-one 1:1 homeschooling or small group music programs (2–3 families) at a child’s home. The teacher will also consider streaming the lesson videos through a private YouTube channel, not necessarily to earn income, but to offer children and parents the opportunity to continue their music education.

Honing in: Local Accounts

In this section, we hone in and focus on two specific local programs implemented in response to COVID-19: a museum in the United States and a private music school in Brazil.

United States: Mini Music Makers Online with the Musical Instrument Museum (MIM)

The Phoenix-Metro area in Arizona, United States, has robust musical opportunities available to families and youth, and there are quite a few early childhood music and movement programs, including nationally recognized (e.g., Music Together and Kindermusik) and locally created at the Musical Instrument Museum (MIM) (e.g., *MIMkids Mini Music Makers*, *Let’s Play Music*, and *Musicology*) curricula. The MIM (www.mim.org) is a global instrument museum housed in a 200,000 square foot facility in Phoenix.

Like in most large US cities, families attend classes at local neighborhood institutions—from home studios to city-run recreation centers to libraries. With the onset of the global pandemic in the United States, many music programs and facilities in Phoenix were forced to close in March 2020 and make major adjustments to their programming. Some programs were able to pivot to offering educational materials online, while others waited to reopen their doors.

Mini Music Makers runs in four work-themed sessions with flexible purchasing options for families and caregivers, which creates a rolling enrollment process. To accommodate schedules and foster engagement, purchasers may begin classes at any point and can sign up for as many or as few classes they like. On average, 85% of students in a Mini Music Makers class are returning.

As the education team transitioned to working from home and the closure was extended beyond the 2-week mark, MIM began to offer online Mini Music Makers via Zoom. A pilot was offered on April 15, 2020 and weekly classes began on Wednesday mornings the following week. With the uncertain financial future and abundance of free offerings at the time, MIM opted for a pay-as-you-wish ticket model and caregivers could pay \$4, \$8, or \$12 to participate. Traditional pricing for in-person Mini Music Makers classes is \$10–\$12, so MIM offered online classes at a reduced rate. In this way, MIM hoped to foster goodwill, and while the earned revenue numbers fell significantly under projections, the new pricing created opportunity to pursue donations, sponsorships, and grants.

Classes were offered in two groups: 10:15 a.m. for 0–3-year-olds and 11:00 a.m. for 3–5-year-olds. All class times were reduced to 30 minutes to take into consideration the developmental appropriateness of programming and screen time for young children. Logistically, two MIM team members were logged into Zoom; the curator of education led the class while an education specialist managed the “room” and allowed participants to enter, ensured they were muted, and gave feedback about the quality of sound and video.

Class structure stayed the same and included greeting songs, fingerplays, voice and sound exploration, and full body movement. Typical activities that involved playing instruments from MIM’s education collection (e.g., drums, resonator bars, Balinese gamelan, Andean pan pipes, and African thumb pianos) were exchanged for activities that could take place with household materials. Caregivers were encouraged to gather “instruments” from plastic food containers or boxes (drums), wooden spoons (rhythm sticks), and something to shake or tap (egg shakers and jingles). Fashion scarves and dish towels replaced early childhood movement scarves, and pieces of tissue paper substituted for feathers. Small stuffed animals served as bean bags. The preschool children in the 3–5-year-old classes delighted in moments of sharing their found materials through the camera screens.

In addition to adjusting activities and materials, instructors had to create new ways to engage with children. Caregivers were asked to adjust their on-screen Zoom name so it was easy to reference children by name throughout the class time, and extra time was given at the end of class for children to see each other and unmute, which typically resulted in both chaos and joy. Additionally, while retention rates fluctuated from the typical 85% returning students down to 60% returning, MIM interacted with students from 21 different states, Canada, and Germany.

When surveyed, caregivers noted that they participated in virtual Mini Music Makers for a variety of reasons. One stated that it’s a “quality interactive activity when we have little else to do during social distancing” and another said that it’s “the only affordable option we’ve found for an at home activity that’s not prerecorded” (MIM caregivers July 2020 survey). As K-12 schools oscillated between in-person and virtual options during the Fall, caregivers also enrolled their children when arts education needs were not being met. One caregiver revealed that they participate because “[our] district does not provide live arts classes for their online students” (MIM caregiver November 2020 survey). Forty caregivers responded to survey requests between July and November. Ninety percent of them noticed increased

musical interest in their children after participating in three or more classes; one caregiver commented that “[my child] is willing to create music with ANYTHING now, not just her instruments” (MIM caregiver July 2020 survey).

While MIM has experienced some challenges with technology and there was a steep learning curve to adapt activities to a virtual environment, the positive effects are also worth noting. In addition to the diverse geographic reach, MIM served new local audiences through this online version of the class. Nearby family resource centers associated with school districts are partnering with MIM to offer the class to their community monthly, and an intergenerational offering through a local non-profit that provides both childcare and senior programming emerged. In this setting, MIM Education partnered with Arizona State University Music Therapy to create a virtual program that is appropriate for both audiences.

Online Mini Music Makers program has also become a way to re-envision professional development training. Since classes are offered virtually, childcare centers can engage with the program and better understand best practices for early childhood music and movement inclusion in their classrooms and follow-up meetings to review classroom documentation are more feasible.

While both instructors and caregivers are eager to return to an in-person setting, the virtual classes have been far better than the alternative of disconnecting entirely. At MIM, COVID-19 created new opportunities for continued engagement and grew programming to diverse audiences. MIM anticipates being virtual through Spring 2021, but there may be space for continued online classes well into the future given community needs and supportive funding.

Brazil: Multifaceted Responses in a Private Music School

While early childhood music education provisions in Brazil continue to be more associated with affluent children and families (Ilari, 2010), in the past few decades we have seen an expansion of programs in public and private daycares, specialized and regular schools. One such private school is *Alecrim Dourado*, in Curitiba, Southern Brazil. The practices at Alecrim involve music and movement activities (“musicalização,” as used in Brazil, see Ilari, 2010). Musicalização constitutes a process of sound sensibilization through active music practices mediated by adult teachers, in which children gradually understand the meaning of musical concepts, engaging with music in a significant way (Barbosa & Madalozzo, 2013; Madalozzo, 2019). These guidelines help describe the work done by the teachers at Alecrim Dourado: a collaborative and collective practice, building a rich musical environment where children are at the center of teachers’ concern. At Alecrim, music classes have a specific structure of activities while creating space for creativity. The school was built as a space of creative and shared experiences for the teachers as well, being organized as a community of practice where peer-teaching is an integral part of its

pedagogy. Alecrim is situated in a house with two classrooms and a backyard. Classes happen weekly, with same-aged children (aged 0–10 years) distributed into small groups of 6–8 and led by a pair of teachers.

In Brazil, where the school year starts each February, schools opened for only four or 5 weeks before the beginning of the COVID-19 quarantine. As a result of the quarantine, in-person classes at Alecrim were suspended, resulting in a plan of Emergency Remote Teaching, where varied and temporary actions and instructional delivery modes were tested as a response to a crisis (Hodges et al., 2020). These authors insist that rethinking an instructional plan can take months; yet all the actions needed a rapid implementation—as in the Brazilian proverb, “changing the tires while the car moves.” The migration to online formats took several weeks, with different actions used to respond to the crisis:

- (a) *Music with the family “lives”*: Starting on March 19, 2020, each one of the teachers from the team took turns transmitting a real-time music class for children to engage in at home. This action lasted for 100 days, as children were invited to make music with their parents or caregivers with different homemade instruments and materials in sessions focused on maintaining the class routine. The live classes were announced on each class’s WhatsApp group and were also streamed on public mode, available for a wider community (e.g., Alecrim Dourado Formação Musical, 2020).
- (b) *Making music in the home* activity repository: Also launched in March, a non-listed YouTube playlist was shared exclusively within the Alecrim community. The playlist contained more than 50 musical activities and sound experiences based on the activities usually done at school, focusing on nurturing the relationships between teachers, children, and their families.
- (c) *Music “grab and go”*: On three occasions (May to August), the teachers prepared kits containing recycled materials, instruction manuals, as well as personal letters. These materials were delivered to each child formally enrolled in the classes, with appropriate social distancing, so that each group would have the same materials to use during classes.
- (d) *Online classes*: starting in June, after 3 months of suspended activities, online classes were offered on the same schedule as pre-COVID, with the same groups of children and teachers through platforms such as Google Meet and Zoom. Nearly 75% of the formerly enrolled children attended the classes. Sessions had a reduced time of duration from 50 to 30 min, keeping the same structure of the in-person classes. School directors shared informative cards with suggestions with families via WhatsApp for setting up a home environment from which to participate in online classes. The project lasted until December.
- (e) *Music with the family* project: In June, the school developed a parallel project for children to engage with their parents on Saturday mornings. This project was loosely tied with the formal class planning structure and had the goal of strengthening the bonds between children and caregivers through music. The program lasted until December and involved “new” children who had not been enrolled in classes before COVID.

As the year came to an end, there have been some challenges and thoughts on *musicalização* online that are worth mentioning. The omnipresence of screens has configured a new way of making music with children. Although many families have not agreed with the switch from in-person to online classes, the Brazilian Pediatrics Society (2020) has reconsidered the role of the screens in children's education and social relationships during the pandemic. The Society has highlighted the "affective role" of screens on ensuring contact and social interactions among children and their families and classmates. The use of screens as a "distance reducer" had a substantial impact on children's music education during this period, especially when caregivers understood and were able to play their roles as mediators in the process by singing, improvising and having fun during the classes, as screens often brought information not directly for the children, but for the mediators.

The classes have literally "invaded" children's homes, and many situations have become part of this new way of making music, such as the exploration of household objects to make music; the (omni)presence of music throughout the daily family routine with newer and broader repertoire; the varied times and places for sound and music exploration—during music classes, over meals or adults' home office activities. Despite all the obstacles and difficulties, these events had unequivocal consequences on new teaching strategies (Renzoni et al., 2020).

Emergent Themes and Implications for ECME in the Post-COVID Era

As seen in the six accounts presented in this chapter, responses to the disruptions caused by the pandemic varied across communities and nations due to local health and sanitation protocols, wealth, access to technology, educational systems, and cultural beliefs. As we juxtaposed the accounts, a first issue that emerged was related to contrasting values associated with early childhood music programs and their provision across different communities and cultures. In some accounts, children's participation in music programs was associated with family bonding (Brazil), while in others it was linked to academic achievement and external goals (Hong Kong). Such distinct views and values obviously guided the provision of musical activities for young children, which ranged from individual teachers and organizations designing innovative programs and materials delivered through virtual platforms, in-person methods, and a combination of formats (e.g., New Zealand, South Korea, and the United States), to a drastic reduction of offerings (e.g., Hong Kong).

The lockdowns and restrictions imposed by the pandemic forced many educators to move into online platforms, further highlighting the challenges of unequal access to technology, as seen in the accounts presented in this chapter. Perceptions of prolonged time in front of screens also varied. While in Brazil screens were described as "distance reducers," in Hong Kong they were viewed as detrimental to child development. In all six locations, music classes and activities were tailored

to children's attention spans, with online activities usually having a shorter duration than pre-pandemic, in-person classes. Music teachers also accommodated their teaching to virtual platforms; in Kenya, for example, Internet latency issues prevented some teachers from engaging in collective singing. Yet, as suggested in several accounts, teachers not only used different apps and digital resources, but also found ways to use home objects and affordances in the homes to teach music to children, even in the face of distractions and screen fatigue. This is consistent with what Koops and Webber (2021) termed "the screen paradox" of music teaching during COVID-19.

The pandemic also brought some new challenges for educators who were teaching in person. As described in the account from South Korea, the need to maintain social distance in music classes required teachers to refrain from engaging in contact activities, like songs in which children hold hands, move, sit close together, or share instruments and props. Because singing is a super-spreader activity, it was either modified or limited. Teachers also had to adhere to cleaning protocols. Whether these adaptations will perdure in the post-pandemic era remains to be determined.

Parental motivations to enroll children in music programs and perceptions of the latter are also worthy of commentary. As noted in the account from the United States, many parents sought out music programs to meet needs that were not being met by children's schools. Other parents enrolled children in music to keep them busy. Some cancelled participation due to safety issues (when classes were held in person) or due to a lack of desire to participate in online lessons, as also described by Koops and Webber (2021). Although in some accounts, parents were described as very engaged in online classes (e.g., South Korea and Brazil), the preference for in-person instruction was evident. While research evaluating young children's education and enrichment programs during the pandemic is still new, recent reports suggest a wide range of parental responses ranging from negative (e.g., Hong Kong) to more positive ones (e.g., Ilari et al., 2021). Navigating parental anxieties, perceptions of music teaching and learning, and musical hopes and dreams will continue to be a challenge, and perhaps a larger one in the post-pandemic world.

It is also important to comment on issues of accessibility to early childhood music education. As eloquently stated in the account from New Zealand, it is clear that the pandemic offered access to early childhood music in areas that have not been well served due to geographical distance. Responses to the lockdowns also resulted in the production of a large quantity of materials in the form of videos, recorded lessons, and talks that are likely to remain available for many years to come. While most of these materials and tools require access to technology, which we understand to be limited in some parts of the world, the production and availability of resources have certainly brought some attention to early childhood music education. It is our hope that these efforts may have a long-term positive impact on the design and provision of musical experiences for young children, as well as on teacher education and policy.

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Chapter 25

Will Programs Be Prepared to Teach Young Children At-Risk Post-pandemic? A Scoping Review of Early Childhood Education Experiences



Megan Kunze  and Laura Lee McIntyre 

The COVID-19 pandemic has disrupted all aspects of life and has been especially disruptive to education and supports for young children (Barnett et al., 2020), including those with or at-risk for disabilities (Neece et al., 2020). In the United States most early childhood education (ECE) programs closed in spring 2020 as children and families sheltered in place. Children with early childhood special education (ECSE) support needs saw a significant decline in services. For example, in a large national survey, parents reported that only 37% of children receiving early childhood special education received full support, with the remaining 63% receiving partial support or no support at all after their preschool classrooms closed (Barnett et al., 2020). Loss of ECE and ECSE supports was especially devastating to low-income or racially, ethnically, or geographically minoritized families already experiencing heightened stress, stigma, and disadvantage (Neece et al., 2020; Soltero-Gonzalez & Gillanders, 2021).

Although the pandemic has had widespread and global impacts, the chaotic changes to early education and the impact on children's school readiness will be felt for years to come. In this chapter, we present findings from a scoping review of global studies documenting the impacts of the COVID-19 pandemic on young children, families, and educators. A scoping review of the literature was chosen to identify available evidence within the preliminary research on COVID-19 and early education (Munn et al., 2018). The purpose of this review is to examine the emerging

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evidence that is available and use it to inform future research including the questions to pose in systematic reviews. We place these findings within the context of early learning, school readiness, and kindergarten transition.

Method

A comprehensive literature search was conducted using APA PsycNet, Science Direct, ERIC, and Medline to identify empirical studies published from January 2020 to July 2021. Studies investigating the effects of school closures and remote education due to COVID-19 on early childhood education that included experiences for families, young children, and their teachers were reviewed. The following inclusionary criteria were used to identify articles for the present review: (1) peer-reviewed journal article, (2) published in English between 2020 and present (July 2021), (3) quantitative and qualitative studies with methods and results related to early childhood education and school experiences, (4) focus on young children (2–8 years), and (5) children at-risk for academic challenges based on disability or delay, geographic isolation, or socioeconomic disadvantage. Articles that included remote therapy or educational experiences unrelated to early school experiences (i.e., preschool or kindergarten) were excluded. Study samples that included age groups beyond preschool and early education were included if the data reported could be parsed based on age category. As shown in Fig. 25.1, the initial search yielded 1118 studies, with 18 excluded for duplicates or non-peer-reviewed. Next, 1100 manuscripts were screened by title and abstract review to determine inclusion resulting in the exclusion of 1079. The remaining 21 manuscripts were reviewed in-depth to determine eligibility for the present review resulting in 13 peer-reviewed journal articles included in the review. Reasons for exclusion in this final stage of the review included child participants' age range beyond early childhood without specific data for young children, no connection between family and return to school, or reports, summary articles, or opinion papers not based on empirical research. See Fig. 25.1 for an overview of the search strategy.

Results

Thirteen studies representing 14 different countries met the criteria (see Table 25.1). Although it is beyond the scope of this review to include statistical analysis, the study features and main findings on ECE and ECSE experiences and recommendations by authors are reviewed below. In particular, the following study characteristics are summarized: (1) study purpose, (2) participants: sample size, description, and country, (3) design and approach, (4) key outcomes, and (5) future recommendations.

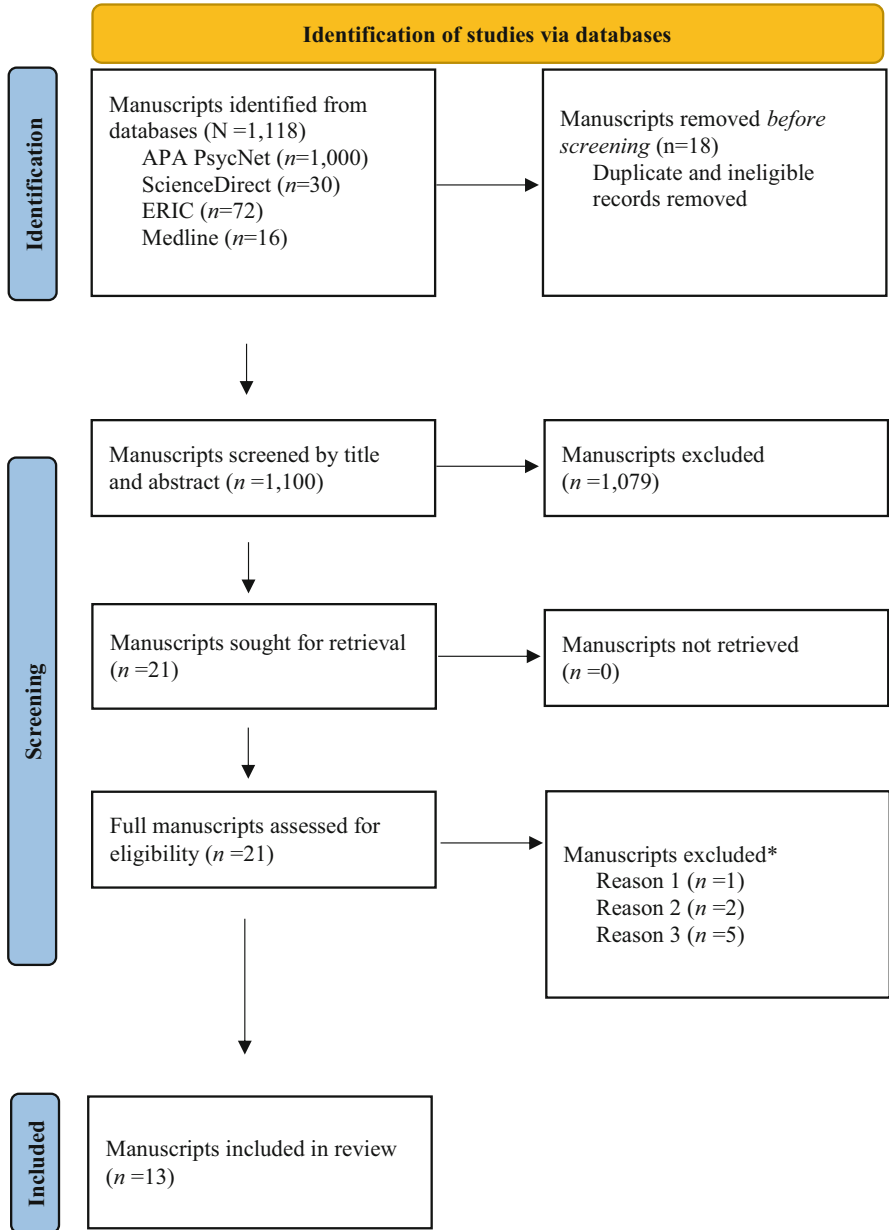


Fig. 25.1 PRISMA 2020 flow diagram

Note. *Manuscripts excluded after full review for the following reasons: Reason 1: age group beyond early childhood (EC) without specific data for EC age-group; Reason 2: No connection between family and return to school; Reason 3: Report or summary article (Page et al., 2021)

Table 25.1 Early childhood education experiences in COVID-19 published between 2020 and 2021 ($n = 13$)

Study	Purpose	Sample size; participant description; country	Design/approach	Key outcomes	Future recommendations
1. Atiles et al. (2021)	Identify teacher experiences in working with preschool aged children and families during COVID-19	26 female ECEs of 3–6-year-old children from rural, urban, and suburban communities with families ranging from middle class to those with limited economic resources Brazil, Costa Rica, Dominican Republic, Mexico, Nicaragua, Paraguay, Puerto Rico, mainland United States	Qualitative interviews	No training to engage YC in online learning Distance education not DAP for ECE and leaves risk of delayed learning opportunities Concerns for family mental health and well-being (food insecurity, financial status) Recognized limited skills of parents as teachers	Technological training for teachers DAP educational planning for YC and for child–parent dyad via virtual delivery Teacher’s role in promoting parent self-esteem and mental health concerns
2. Barnett, Grafwallner et al. (2021)	Identify how COVID-19 has affected home learning activities, preschool participation, and services received by children and families in support of distance learning	National sample of 1000 parents of 3–5-year-old preschoolers (not yet in kindergarten) part of PLA study United States	Nationwide survey of parents, a review of state policies, guidance and resource documents, and scans of media coverage on the development of the pandemic	Preschool enrollment of participants decreased from 61% to 8% Change in services for ECE children (loss or decrease) with Black and Hispanic preschoolers losing most, if not all services Decrease in amount and type of educational opportunities, yet received some distance education Increase in TV/video viewing Decline in parent/child activities with a positive association between parent education level and reading and play and a negative association for watching TV and playing games on computer	Recognize children’s limited experience with school routines, classroom expectations which impacts transition to kindergarten Identify mental health supports for families and children Create a stable ECE workforce with training and opportunity Partner with parents upon re-opening to assess, measure, and monitor progress of children and parental engagement Address systemic fragmentation of ECE
3. Dong et al. (2020)	Identify Chinese parents’ beliefs and attitudes toward their child’s online learning due to pandemic	3275 parents of children enrolled in ECE China	Online survey	Parents had negative beliefs toward online learning in ECE Three reasons for parental rejection of online learning: 1. Various shortcomings	For online learning to be a viable option for Chinese families, authorities must: Prepare educators to use virtual instruction

4. Egan et al. (2021)	Gain insight into impact of lockdown on YC and families	509 participants with YC 1–10 years of age* Ireland	Qualitative and quantitative data collected from an online Qualtrics survey	2. Limited self-regulation in YC 3. Limited time and skills of parents to support learning	Create curriculum that meets needs and interests of YC Support families as well as educate children
5. Kim et al. (2021)	Identify extent of parent/caregiver participation in ECE learning and available resources to facilitate learning experiences during school closures due to COVID-19; Ethiopia specifically because of their recent increase in ECE with focus on kindergarten preparation	480 parents/caregivers of YC in pre-primary education Ethiopia	Phone surveys	School closures due to COVID-19 likely increased inequities between child learning due to families in poverty and parental literacy Families identified barriers as limited learning resources, lack of technology, lack of knowledge to instruct child,** Limited amount of parent-child learning activities occurred in the home during school closures Increased child stress and anxiety with higher reports of child discipline	Government guidance policies on distance education for ECE Track YC mental health (psycho-social development) to provide necessary support to treat the disparities as a result of COVID-19 Attention, measurement, and response to other effects of school closures (e.g., sense of community, violence in the home, job loss, and malnutrition) and the relationship of these factors and limited early learning opportunities
6. O'Keefe and McNally (2021)	To describe the role of play in teacher recommendations for children in ECE during school closures and the role of play in return to school	Teachers ($n = 310$) with experience teaching in ECE classrooms (children aged 4–7 years) Participants were self-selected Ireland	Online Qualtrics survey shared through social media and through contact with school principals	Teachers reported they encouraged parent/child play during closures Outcomes suggested play will be an important factor for return to school to rebuild	Policy in ECE including a plan for play to be incorporated upon return to school (e.g., shared materials and social distancing) Supporting children in social

(continued)

Table 25.1 (continued)

Study	Purpose	Sample size; participant description; country	Design/approach	Key outcomes	Future recommendations
7. Otero-Mayer et al. (2021)	Analysis of how parents responded to remote learning for their children and a description of collaboration between families and schools	1266 Families of children infancy to 6 years 1235 ECE teachers Spain	Questionnaire via email; one for teachers and one for parents	A little over half of parents surveyed considered themselves ready to teach their child due to switch to remote learning, while the remaining were not prepared Majority of parents reported good communication with their child's school Most families had access to internet; however, teachers reported limited access to technology and internet as the main reason for limited collaboration with some families during remote learning	Cooperation between families and school should be improved in pandemic and non-pandemic times (e.g., highly educated families had more communication with the school than those families with less educated parents) Increase individualized education in the classroom through teacher training Technological equipment and internet access provided to all families
8. Quenzer-Alfred et al. (2021)	Changes in child skill set (language and math skills) due to remote learning and closures associated with the pandemic	49 children for quantitative analysis Interviews: Parents ($n = 2$) Professionals ($n = 5$) Children ($n = 6$) Germany	Pre- and post-pandemic intellectual testing Guided interviews with parents and professionals Group interviews with children	Shutdown may have had negative impact on skill acquisition for preschool aged children which creates a more challenging transition to kindergarten for YC	Continued assessment measures to analyze change in skill level occurs across population and to what extent Provide students with support for success considering inequities in performance due to

<p>9. Soltero-Gonzalez and Gillanders (2021)</p>	<p>Perception of Latinx parents from low-income households on their child's educational experiences in response to COVID-19</p>	<p>20 Latinx parents who identified as low-income families of YC in ECE United States</p>	<p>30-45-minute phone interviews; 18 conducted in Spanish/2 in English</p>	<p>Parents engaged in variety of activities with their children during school closures Parents reported feeling stressed due to child activities and remote education</p>	<p>recent school closures Consideration for ECE school be considered critical institutions in future emergencies to possibly prevent a delay in development of YC Increasing collaboration and partnership between teachers and parents Increase assistance for parents engaging their child in learning activities Teacher training should focus on sociocultural practices of the families they work with and add these components into their teaching of YC</p>
<p>10. Steed and Leech (2021)</p>	<p>Explore differences and similarities between ECSE and ECE teachers' provision of remote learning opportunities to students and families</p>	<p>947 ECE teachers 160 ECSE teachers United States</p>	<p>Qualtrics survey completed in April 2020</p>	<p>Some teachers received training to use virtual platform to interact with students and families Challenges identified: Reliance on family to keep child engaged in learning Unprepared to teach remotely and facilitate preschool while not in person Emotional toll on teachers due to COVID and work changes No access and issues with technology for families Lack of guidance of how to facilitate remote schooling; no clear administrative guidance Struggle with accurate assessment and evaluation of student progress and learning ECSE teachers noted difficulty collaborating with ECE teachers to promote inclusion</p>	<p>Increased training for teachers to use remote learning methods and provide support to families</p>

(continued)

Table 25.1 (continued)

Study	Purpose	Sample size; participant description; country	Design/approach	Key outcomes	Future recommendations
11. Timmons et al. (2021)	Identify challenges and successes of remote teaching and learning Recommend remote learning practices and strategies for in-person learning	K-second grade teachers currently working in ECE ($n = 25$) Parents of YC ($n = 11$) Canada	45-minute semi-structured interviews	Concerns of inequitable access to technology to access education opportunities Difficulty navigating asynchronous and synchronous learning with additional concerns for equitable access to class being held at one time only versus at discretion of the family; yet synchronous school was described as a better support for social emotional development for students Limited social supports at home leading to large concerns for social and emotional development Teachers shared concern for family stress and feelings of being overwhelmed. Parents described shifting to more realistic	Training for teachers to teach using technology Support for students on using technology platform for school Provide integrated approach to support families using community services and partnerships Use both asynchronous and synchronous learning and encourage social development Clearly inform families and students of expectations and lesson goals with materials and resources available with the option for individualized instruction as needed Formal and informal assessments to accurately adapt curriculum to meet students' individual needs Policy directives for future online education using equity, diversity, and inclusion in planning
12. Wendel et al. (2020)	Examine changes in parent and child behavior as a result of COVID-19 pandemic. Specifically, parent involvement in remote learning for children with ADHD	Parents of children ages 4–5 years from 32 kindergarten classes and six schools 152 parents completed winter survey 184 parents completed spring survey Canada	Survey data collected at T1: pre-COVID T2: January 2020 (winter survey) T3: May and June 2020 (spring survey)	Parent reported changes in child ADHD symptomology and behavior between T2 and T3 No significant changes in parent involvement between T1 and T2 or T3	School psychologists should provide coaching to parents on structure, activities, and routines Recommendations for physical activity during quarantine times to assist with ADHD symptoms Encouraging school professionals to acknowledge various levels of adversity in families served to best focus on those at higher risk

<p>13. Yildirim (2021)</p>	<p>Identify what preschool teachers and parents think are the repercussions of the pandemic on ECE</p>	<p>25 ECE teachers: who were providing distance education due 30 Parents: who had a preschool aged child and were in contact with their child's teacher during school closures All participation was voluntary United States</p>	<p>Semi-structured interviews and videos of activities or interventions suggested (by teacher) or implemented (by parent) in support of interview outcomes</p>	<p>Negative impacts included limited teaching opportunities for basic concepts Adverse impact of limited face to face instruction and education: Socialization Preparation for school Emotional development Academic performance</p>	<p>Free and high-speed internet and technological devices provided for all students Provide a TV channel for activities and education that are short and appropriate for preschool-aged children Distance education programs and guidebooks for both teachers and parents In-service trainings on distance education; including courses</p>
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*results broken into two groups with one being ages 1-5 years **50% of rural families did not have electricity; both urban and rural families had very limited access to technology and very few books were found in the households
DAP developmentally appropriate practice (NAEYC, 2020), *ECE* early childhood education, *ECSE* early childhood special education, *PLA* ADHD attention deficit and hyperactivity disorder, *DAP* developmentally appropriate practice (NAEYC, 2020), *ECE* early childhood education, *ECSE* early childhood special education, *PLA* Preschool Learning Activities developed by National Institute for Early Education Research; T1: time 1; T2: time 2; T3: time 3, *YC* young child/children

Purpose of Included Studies

The purpose of all included studies was to provide a perspective of parents, teachers, or young children on their educational experiences in ECE or ECSE due to school closures during the COVID-19 pandemic. Three studies focused on teacher experiences in the transition from in-person teaching to virtual instruction (Atiles et al., 2021; O’Keefe & McNally, 2021; Steed & Leech, 2021). The study from Steed and Leech (2021) was the only study to focus on teachers in both ECE and ECSE programs specifically. Three studies solely focused on the impact of COVID-19 school closures on the parents of young children. Dong et al. (2020) explored Chinese parents’ beliefs and attitudes toward virtual education for their young children. Kim et al. (2021) looked to identify Ethiopian parents’ ability to facilitate learning at home for their young children. Soltero-Gonzales and Gillanders (2021) interviewed Latinx parents from low-income households in the United States to understand their experiences during this educational shift. Two studies (Otero-Mayer et al., 2021; Timmons et al., 2021) included perspectives of both teachers and parents in their study purpose. The goals of the remaining five studies were to have parents report their child’s experience with virtual learning due to school closures. While Barnett et al. (2021) focused only on parents’ reflections of child experiences, other studies combined perspectives: (a) parent and child by parent report (Eagan et al., 2021; Wendel et al., 2020), (b) parent, child by parent report, and teacher (Yildirim, 2021), and (c) child by parent report, teacher, child by child report, and assessment measures (Quenzer-Alfred et al., 2021).

Participants

All included studies focused on school and learning experiences of participants: early childhood teachers, parents, and young children in ECE or ECSE during the COVID-19 pandemic. The 13 articles included distinct study samples. The studies included a combined sample of 2733 teachers, 6777 parents, and 55 children. Sample sizes varied across the studies. More than half of the studies ($n = 8$; 61%) used surveys and reported on large sample sizes (median = 1114; range 184–3275). Five studies used interviews with smaller sample sizes (median = 30; range 13–55). Only one study used quantitative analysis of pre- and post-testing to determine child scores on a skill assessment, including 49 child participants in their analysis (Quenzer-Alfred et al., 2021).

All child participants were described as at-risk for poor academic performance and experiencing developmental delays due to change in educational opportunities. The majority of the children did not have a specified diagnosis, except for Wendel et al. (2020), in which children had a diagnosis of ADHD. Barnett et al. (2021) described participants as having an individualized education plan (IEP), thus qualifying under special education in their school settings (Barnett et al., 2021).

All but one study (Timmons et al., 2021) included demographic information on participants, such as community type (rural and urban), sex, and race/ethnicity. Of the 12 that reported demographic information, most studies included some information on participant ethnicity; however, the ethnicity was more often unspecified and reported as the country of residency rather than reported specifically by the participant. For example, Atilas et al. (2021) listed the number of participants from Latin American countries (i.e., Brazil, Costa Rica, Dominican Republic, Mexico, Nicaragua, Paraguay, or Puerto Rico) without specifics of participant ethnicity. Dong et al. (2020) reported participants were from China, with no other description. Egan et al. (2021) described their participants as being from Ireland and the United Kingdom without further description. Because the studies took place in a wide range of countries, it is assumed that a diverse participant group is represented. Of the eight studies that reported adult participant sex, majority of the teachers and parents that participated identified as female (range = 84–100%).

Three studies described parent participants as experiencing economic barriers. Specifically, the sample in Atilas et al. (2021) included families with limited economic resources in various Latin American countries. Soltero-Gonzales and Gillanders (2021) recruited a sample of low-income Lantinx families in the United States. Kim et al. (2021) surveyed families in Ethiopia and described participants as living in poverty with minimal learning resources, no electricity, and inability to provide technology for learning opportunities. An exception to specific economic description was the study by Quenzer-Alfred et al. (2021). They stated the schools chosen as recruitment sites were in economically diverse urban areas to include families in poverty. However, the study's description of economic barriers was not further defined.

Study Design and Instruments

Eight studies used a survey to gather the experiences of participants (Barnett et al., 2021; Dong et al., 2020; Egan et al., 2021; Kim et al., 2021; O'Keefe & McNally, 2021; Otero-Mayer et al., 2021; Steed & Leech, 2021; Wendel et al., 2020). Six of the eight survey studies used an online survey format (e.g., Qualtrics). Kim et al. (2021) conducted a phone survey as some participants would not have access to an online survey. Otero-Mayer et al. (2021) emailed a questionnaire to participants to complete, which was then returned via email. Most studies reported on cross-sectional data only, with participants responding to a survey at one point in time. In contrast, Wendel et al. (2020) used an online survey format and surveyed participants at three different time points.

The remaining five studies included in this review used interviews to collect participant data (Atilas et al., 2021; Quenzer-Alfred et al., 2021; Soltero-Gonzalez & Gillanders, 2021; Timmons et al., 2021; Yildirim, 2021). Two of these five interview studies included additional methods of data collection. Yildirim (2021) used video analysis of activities conducted with the child to support the interview data.

Quenzer-Alfred et al. (2021) used qualitative analysis of pre- and post-assessments of child performance. Children were interviewed in small groups in addition to interviews of the parents and professionals individually.

Study Outcomes

All 13 studies reported evidence that participants did not find virtual education to be developmentally appropriate for young children (Atiles et al., 2021; Barnett et al., 2021; Dong et al., 2020; Egan et al., 2021; Kim et al., 2021; O’Keefe & McNally, 2021; Otero-Mayer et al., 2021; Quenzer-Alfred et al., 2021; Soltero-Gonzalez & Gillanders, 2021; Timmons et al., 2021; Steed & Leech, 2021; Wendel et al., 2020; Yildirim et al., 2021). Specifically, studies reported virtual learning as a detriment to social-emotional development (Egan et al., 2021; Timmons et al., 2021), while others described it as harmful to overall development, especially for children experiencing socioeconomic difficulties (Kim et al., 2021; Quenzer-Alfred et al., 2021; Wendel et al., 2020; Yildirim et al., 2021). Barnett et al. (2021) reported a decrease in ECSE services, for example, in type and frequency of services during school closures and a decrease in overall preschool enrollment due to virtual instruction.

O’Keefe and McNally (2021) described teachers’ attempts to facilitate parent-child interactions by encouraging play to address learning at home. Teachers emphasized the role of play across curriculum activities and expressed frustration and concerns regarding virtual play facilitation as well as play implementation during a return to school given COVID restrictions, such as social distancing and no shared materials. Additionally, Steed and Leach (2021) reported teachers’ struggle to accurately assess and evaluate the progress of young children due to limited teaching opportunities of basic concepts. Yildirim (2021) linked this deficit in teaching and assessment to schools’ lack of preparation to teach virtually. Participants believed low expectations on the part of the school system are partly responsible for the minimal developmental gain and limited academic growth in young children during the COVID-19 pandemic.

Seven studies reported on outcomes of limited training and preparation of teachers and parents to facilitate effective virtual education (Atiles et al., 2021; Dong et al., 2020; Kim et al., 2021; Otero-Mayer et al., 2021; Soltero-Gonzalez & Gillanders, 2021; Steed & Leech, 2021; Timmons et al., 2021). Reported barriers preventing effective virtual learning included limited learning resources and materials in the homes (e.g., toys, books; Kim et al., 2021), lack of technology available to families (Kim et al., 2021; Otero-Mayer et al., 2021; Steed & Leech, 2021), minimal knowledge and time on the part of parents to facilitate activities (Dong et al., 2020; Kim et al., 2021; Otero-Myer et al., 2021; Timmons et al., 2021). Steed and Leech (2021) found some teachers were also unprepared to teach virtually despite receiving training to do so, including difficulty in collaboration among

professionals to facilitate learning. Both Steed and Leech (2021) and Timmons et al. (2021) reported limited guidance from administration to teachers on how to provide asynchronous and synchronous education to young children.

Eight studies demonstrated participants' concern for the mental health and well-being of families (Atiles et al., 2021; Dong et al., 2020; Egan et al., 2021; Kim et al., 2021; O'Keefe & McNally, 2021; Soltero-Gonzalez & Gillanders, 2021; Steed & Leech, 2021; Timmons et al., 2021). For example, increased parent stress due to parents' limited time and skills to teach their children was reported (Dong et al., 2020; Soltero-Gonzalez & Gillanders, 2021). In addition to heightened adult stress, increased rates of child discipline, more child stress, and anxiety were outcomes reported by various participants (Kim et al., 2021; O'Keefe & McNally, 2021). Egan et al. (2021) reported on child responses suggesting that children missed their friends and playtime and generally missed being in school or childcare settings. Overall, Egan et al. (2021) concluded children were worried and bored during the pandemic-related school closures. Although the pandemic was reported to have deleterious effects on families, findings from Egan et al. (2021) suggest that more competent and resilient families had better mental health and well-being than less competent and resilient families. Finally, two studies reported that teachers also felt overwhelmed and had difficulty handling their own family life while supporting the families with whom they work (Steed & Leech, 2021; Timmons et al., 2021).

Future Recommendations

All included studies made recommendations for educational practices for young children, families, and teachers in post-COVID-19 circumstances and anticipation of future school closures. Five categories surfaced as dominant recommendation themes across studies. Recommendation themes are: (1) increasing teacher preparation, (2) implementing developmentally appropriate practices (DAP) in face-to-face and virtual early education, (3) addressing unmet needs of children, (4) supporting the need of families, and (5) instituting system-wide changes.

Increasing Teacher Preparation

Seven studies recommended preparing teachers to teach young children in virtual education platforms (Atiles et al., 2021; Dong et al., 2020; Otero-Mayer et al., 2021; Soltero-Gonzalez & Gillanders, 2021; Steed & Leech, 2021; Timmons et al., 2021; Yildirim, 2021). Specific recommendations across the studies included having teachers receive technological training and preparation to use technology to teach young children and reach families (Atiles et al., 2021; Dong et al., 2020; Steed & Leech, 2021; Timmons et al., 2021; Yildirim, 2021). For example, Yildirim (2021) suggested guidebooks for teachers and parents with instructions for distance education paired with virtual adult learning opportunities and courses for continuing

education credit. Otero-Mayer et al. (2021) argued professional training will increase teachers' ability to provide individualized education during virtual instruction. Increasing teachers' focus on families as a whole unit was also recommended, including training teachers to promote parent self-esteem and positive familial mental health (Atilas et al., 2021). Soltero-Gonzalez and Gillanders (2021) recommended that teacher training focus on sociocultural practices for the families they work with (e.g., how parents play and teach their child in the home) and recommended adding these components into their teaching of young children upon returning to the classroom.

Implementing DAP in Virtual and Post-pandemic, Face-to-Face Early Education

Five studies identified inadequacies of virtual instruction for young children, recommending future practice changes (Atilas et al., 2021; Dong et al., 2020; O'Keefe & McNally, 2021; Timmons et al., 2021; Yildirim, 2021). Atilas et al. (2021) and Dong et al. (2020) both suggested that DAP standards be considered in curriculum planning. More specifically, ensuring individual needs and interests of the child are included in this planning as well (Atilas et al., 2021; Dong et al., 2020). O'Keefe and McNally (2021) recommended further research on the importance of play for young children with special needs in the aftermath of the pandemic and ECE. Additionally, Timmons et al. (2021) suggested that educators use both asynchronous and synchronous learning to encourage social development through curriculum adaptations and lesson planning. To expand this suggestion, Timmons et al. (2021) recommended informing families of learning expectations and lesson goals, making materials and resources available, and providing the option for individualized instruction as needed. Yildirim (2021) highlighted activities taught virtually should be short and appropriate for preschool-aged children.

Addressing Unmet Needs of Children

Seven studies recommended changes in practice to address the unmet need of young children during and post-virtual learning (Barnett et al., 2021; Egan et al., 2021; Kim et al., 2021; O'Keefe & McNally, 2021; Quenzer-Alfred et al., 2021; Timmons et al., 2021; Wendel et al., 2020). Specifically, Barret et al. (2021) suggested that professionals recognize children's limited experience with school routines and their lack of opportunity for adjustment to classroom expectations, ultimately considering that missed early experiences will impact their transition to kindergarten. Similarly, Egan et al. (2021) presented the importance of the teacher in support for young children in overcoming the negative impacts of COVID-19 on socioemotional development. Egan et al. (2021) suggested that teachers prioritize mental health and social-emotional development to establish resiliency and coping skills for young children. Along these lines, Kim et al. (2021) emphasized the importance of tracking

mental health (e.g., psychosocial development), encouraging educational professionals to provide necessary support while considering unique disparities among families.

Various studies emphasized the importance of measurement and assessment (Barret et al., 2021, Kim et al., 2021; O’Keefe & McNally, 2021; Quenzer-Alfred et al., 2021; Timmons et al., 2021; Wendel et al., 2020). Kim et al. (2021) pointed to the importance of measures to determine the individual effect of school closures based on family circumstances (e.g., sense of community, violence in the home, job loss, and malnutrition) and the relationship of these factors with limited early learning opportunities. Other studies echoed the importance of monitoring progress in various developmental domains (e.g., social, emotional, physical, and academic) due to the impact of COVID-19 considering limited exposure to peers, minimal social opportunity, and decreased physical activity during quarantine (Barret et al., 2021; O’Keefe & McNally, 2021; Quenzer-Alfred et al., 2021; Wendel et al., 2020). Recommendations included partnering with parents upon re-opening to assess, measure, and monitor children’s progress, as well as focusing on parental engagement with ECE (Barret et al., 2021). Further, these formal and informal assessments should use curriculum adaptations to meet children’s individual needs accurately (Timmons et al., 2021).

Supporting Needs of Families

Five studies gave specific recommendations in support of families (Dong et al., 2020; Otero-Mayer et al., 2021, Soltero-Gonzalez & Gillanders, 2021; Wendel et al., 2020; Yildirim, 2021). For example, Otero-Mayer et al. (2021) and Soltero-Gonzalez and Gillanders, (2021) emphasized individualized cooperation between families and schools should be improved in pandemic and non-pandemic times especially considering the education level of families (e.g., highly educated families had more communication with the school than those families with less-educated parents). Additionally, studies recommended universal access to the internet and technological equipment (Otero-Mayer et al., 2021), educational opportunities through coaching of parents to increase child engagement and activities (Soltero-Gonzalez & Gillanders, 2021; Wendel et al., 2020), and guidebooks and distance education specific to parent’s role in their child’s distance education (Yildirim, 2021).

Instituting System-Wide Changes

Most studies (n = 8; 62%) made recommendations for early education system change (Barret et al., 2021; Egan et al., 2021; Kim et al., 2021; O’Keefe & McNally, 2021; Quenzer-Alfred et al., 2021; Timmons et al., 2021; Wendel et al., 2020; Yildirim, 2021). For example, Quenzer-Alfred et al. (2021) suggested that education systems consider ECE programs critical institutions, thus suggesting that ECE remains open to prevent missed learning and opportunities for young children in

future emergencies. Kim et al. (2021) recommended creating government policies on the implementation of virtual and distance learning specifically for young children in the case of future ECE closures. Additionally, several studies recommended policies to address equity, diversity, and inclusion in distance education delivery and technology platform use (Timmons et al., 2021; Yildirim, 2021).

Aiming toward a successful education system in early education, Barret and colleagues (2021) realized the importance of a trained and stable workforce. Additionally, these authors suggested that fragmentation within the ECE system be a focus (Barret et al., 2021). Timmons et al. (2021) suggested that one way to unite the system in supporting families included is providing an integrated care system that uses community services and partnerships (e.g., social work services, youth organizations, and food banks). Another example, described by Wendel et al. (2020), is encouraging school professionals to acknowledge various levels of adversity in families, and prioritizing those at highest risk.

Finally, two studies made recommendations around the importance of play in the education of young children (Egan et al., 2021; O’Keefe & McNally, 2021). Specifically, O’Keefe and McNally (2021) suggested a policy in ECE to include a plan for play to be incorporated upon return to school in light of COVID restrictions limiting sharing of materials and keeping a safe distance. Egan et al. (2021) added the recommendation of using play pods (e.g., small groups who remain together for a length of time) to decrease exposure to illness.

Discussion

Quality early childhood education is essential to school success. This review demonstrates the additional, unpredictable barriers emphasized by the COVID-19 pandemic from a global perspective. This review highlights the multiple risk factors (e.g., geographic isolation, developmental delays, and low socioeconomic status) that tend to increase the risk of academic failure for vulnerable populations of young children and their families. While the extent of this global crisis’ impact on early education is still unfolding, this scoping review synthesizes current research on teachers’, parents’, and children’s experiences during pandemic-related school closures. It provides essential recommendations for school adaptations and family support. To the best of our knowledge, this is the first review of its kind in early childhood education and care (ECEC).

Limitations of Extant Literature

Despite the important outcomes presented in this review, there are limitations to the conclusions drawn here. The most prominent limitation of the current literature is the variability and unforeseen impact of COVID-19, especially the steady resurgence of

the pandemic in countries around the world (World Health Organization, 2021). Thus, many perspectives may be missed, and comprehensive conclusions cannot be drawn because the pandemic is ongoing. However, that unfortunate fact makes the current review necessary—the recommendation from global researchers overwhelmingly suggests our current state in the new normal (Neece et al., 2020; Park et al., 2020). Future research should consider follow-up surveys to identify post-pandemic needs to include ways education systems did respond, the relative efficacy of various strategies, and the actions taken by nations around the world to quell the spread of the disease. Additionally, while the studies included various countries, many were not represented, or only a small number of participants were from that particular location (e.g., Atilles et al., 2021). Nonetheless, the overall sample represents an extensive set of participants from several countries worldwide.

A second limitation of the current group of studies is collecting data via email and the Internet. While some studies used face-to-face interviews (e.g., Quenzer-Alfred et al., 2021) or telephone interviews (e.g., Soltero-Gonzalez & Gillanders 2021), the majority of survey participants had access to the Internet and a technological device available to complete the survey, even during the pandemic. Therefore, it is possible that a survey of parents that was not reliant on the internet for dissemination and completion might have yielded different results. It is likely that households without internet and technology access did not complete the survey, nor were they able to access online, virtual learning opportunities for their child, creating an even larger equity gap. The one exception is Barret et al. (2021), who provided technology and Internet access to participants who needed it. However, the number of participants that partook in this offer was not reported (Barret et al., 2021).

A third limitation was the underrepresentation of fathers and male teachers. Despite studies representing diverse populations, most participants identified as female and mothers. A fourth limitation pertained to child outcomes. Only one study reported child-reported perspectives. Most studies relied on parent or teacher interpretations and reports of child impact. Future research could incorporate other indices of child behavior, including observation or direct assessment to better understand child outcomes.

Finally, there is minimal evidence that the recommendations made by a group of authors are transferrable by country and culture. For example, the United States has made strides in increasing internet access to rural families, and schools in some other nations issued technology tools to families. However, Kim et al. (2021) conducted their study in Ethiopia and many participants not only lacked access to technology devices and the internet but also were without electricity. The global health pandemic, with its reliance on technological alternatives, redefined basic needs in contemporary society when individuals and groups could not access the resources available.

Strengths of Extant Literature

There are at least five strengths of the extant literature. First, the studies presented a broad perspective from various countries around the world (see Table 25.1) providing evidence of the global impact of school closures on teachers and families. Yet, there were commonalities among the participating populations (e.g., difficulty in educating children at home and difficulty accessing technology) despite geographical separation. Second, several studies included novel outcomes based on child, parent, and teacher experiences during COVID-19 (e.g., importance of emphasizing play and struggles to assess child's developmental gains). Third, these outcomes led to various recommendations to address specific issues of teacher preparation, support for children and families, and system changes for early education. Education systems can use these recommendations to improve early education and family support in future school closures either due to COVID-19 or unforeseen additional global events. Fourth, the studies took place at various timeframes across the pandemic, which provide a broader view of the impact due to COVID-19. Interestingly, the events described in this literature did not dramatically change throughout data collection periods despite some studies conducted during initial shutdown and other during the extended closures.

Conclusion

The COVID-19 pandemic has disrupted ECEC across the globe, with lower income communities, children of color, and children with disabilities more impacted (Barnett & Jung, 2021; Neece et al., 2020). Although this scoping review reflects a snapshot of our current understanding of the pandemic's impact on children's early learning and school readiness, the impacts of the pandemic will likely unfold over years to come. The recommendations contained in the current group of reviewed articles are useful for the likely continued impact of the pandemic as well as other global disasters that challenge early education access. If early education is prioritized and viewed as essential, care can be reimagined to include a continuum of integrated services that relies on family-school partnerships, early education, and community services.

Statements and Declarations Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Institutional Review Board of the University of Oregon.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Conflicts of Interest: The authors declare no conflict of interest.

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