A Mixed-Methods Study of Early Childhood Education and Care in South Korea: Policies and Practices During COVID-19

Hae Min Yu1 · Yu Jin Cho2 · Hyun Jeong Kim3 · Jin H. Kim4 · Jee Hyun Bae2

Accepted: 4 July 2021 / Published online: 12 August 2021 © The Author(s), under exclusive licence to Springer Nature B.V. 2021

Abstract
This study of South Korea’s response to COVID-19 has three purposes. First, it uses document analysis to examine policies, strategies, and resources offered by the South Korean government and public organizations to support young children and families during the first 6 months of the pandemic. Next, it uses open-ended surveys with 30 directors of early childhood institutions to explore institutional-level supports and needs during the pandemic. Finally, it looks at the discrepancies between stated policies outlining the South Korea’s response to COVID-19 and the lived experiences of early childhood educators as a route to arriving at recommendations for education policymakers and other stakeholders. To that end, we reviewed government documents (n = 84) containing early childhood education-related responses to Covid-19 established by the Ministry of Education, the Ministry of Health and Welfare, and other relevant government sectors. An online survey with 17 kindergarten and 13 child care center directors was also analyzed. Using content analysis, the findings revealed that the government’s policies and guidance for Early Childhood Education and Care (ECEC) as well as the institutional supports for children and families were overall comprehensive in its scope. The analysis, based on the five tenets of the Whole Child approach, also indicated that the government’s policy responses and services for ECEC focused mainly on the ‘Safe’ and ‘Supported’ tenets, while ‘Challenged’ was given the least amount of consideration. The survey responses demonstrated different measures taken by kindergartens and child care centers highlighting the separate nature of ‘education’ and ‘care’ in South Korea, while also indicating limited resources for supporting children’s psychological well-being and for children and families in need. This overview provides a foundation for further discussion and research on the impact of Covid-19 on ECEC in South Korea and beyond.

Keywords COVID-19 · South Korea · Early childhood education and care · Government · Policy · Kindergarten · Child care center · Whole child approach

Introduction
South Korea was one of the first nations to be affected by COVID-19, with its first confirmed case reported on January 20, 2020 (Korea Disease Control and Prevention Agency, 2020). With the unexpected spike in cases in February, schools were closed on February 23 nationwide. After multiple times of postponing the opening of schools, kindergartens reopened on May 20 and child care centers on June 1. During the period of school closure, the Ministry of Education (MOE) and the Ministry of Health and Welfare (MOHW) ordered all kindergartens and child care centers to offer emergency childcare services, and issued policy measures to provide support and resources for children and families’ health and well-being, and launched distance learning through inter-departmental collaborations.

To support knowledge exchange and to assist education leaders around the world in securing children’s educational opportunities during this pandemic, this study provides a comprehensive overview of South Korea’s governmental policies and services from various sectors that have supported Early Childhood Education and Care (ECEC) during the first 6 months of the COVID-19 pandemic. This study has three purposes. First, it uses document analysis
to examine policies, strategies, and resources offered by the South Korean government and public organizations to support young children and families during the first 6 months of the pandemic. Next, it uses open-ended surveys with 30 directors of early childhood institutions to explore institutional-level supports and needs during the pandemic. Finally, it looks at the discrepancies between stated policies outlining the South Korea’s response to COVID-19 and the lived experiences of early childhood educators as a route to arriving at recommendations for education policymakers and other stakeholders.

Early Childhood Education and Care in South Korea

Kindergartens and Child Care Centers

In South Korea, ECEC comprises two separate systems. The MOE oversees kindergartens, whereas the MOHW supervises child care centers. Although their functions and roles have become very similar over time (See Park & Park, 2015), major differences between the two systems still remain, including the age of children served, jurisdiction, legal basis, teacher qualification systems, and instructional days and time, as shown in Table 1.

As a result of the government's efforts to integrate the ECEC systems, kindergartens and child care centers began to follow a common national-level early childhood curriculum, the Nuri Curriculum, for 3 to 5-year-old children in 2013 (Ministry of Education, Science, and Technology & MOHW, 2013). In 2019, the MOE and MOHW announced the mandated implementation of the Revised Nuri Curriculum for 3 to 5-year-olds in all kindergartens and child care centers, beginning March 2020. One of the key characteristics of the Revised Nuri Curriculum is that it strongly emphasizes child-centered and play-based learning, taking a holistic approach rather than focusing on academic performance (MOE & MOHW, 2019). Instead of dividing learning content by age, the Revised Nuri Curriculum presents the five learning areas (physical exercise and health; communication; social relationships; artistic experience; and nature exploration) that all children aged 3 to 5 should experience, and grants every institution and teacher a higher level of autonomy in applying the curriculum to their specific context. Due to the pandemic however, South Korean early childhood educators were challenged to successfully provide child-centered and play-based learning according to the curriculum (Kim et al., 2020; Park & Bae, 2020).

Based on the ECEC system of kindergartens and child care centers in South Korea, we use the term “early childhood education and care (ECEC)” to refer to center-based education and care for children between birth and age 5 throughout this article.

Literature on COVID-19 and ECEC in South Korea

Few research studies have been published on the non-medical impacts of the current pandemic focusing on young children in South Korea. Most of the published literature is written in Korean, and the topics focus on the challenges and needs that families and early childhood educators are experiencing during the pandemic. For example, these topics include the dilemmas and challenges due to the school closure and re-opening, emergency child care services, and shift to distance learning were examined from the experiences of pre-service and in-service teachers (Han, 2020; Kim et al., 2020), directors (Park & Bae, 2020), and children and their parents (Lee & Shin, 2020), and the responses from the government and early childhood institutions during the pandemic.
first 2 months of the pandemic (Choi, 2020). These studies together suggested that active collaboration between school and home, transformation of teaching and teacher education, and the government’s systemic support are essential to the success of children’s development and learning.

Very little research on this topic is available in English. Byun and Slavin (2020) investigated South Korean educational responses during the school closure and highlighted some positive outcomes from the adoption of distance learning, such as improved quality of individualized learning and teaching content. After reviewing South Korea’s policies and services on child welfare and safety during the pandemic, Chun and Kim (2021) urged the Korean government’s stronger support in the areas such as mental health, child abuse prevention, and the provision for low-income families. Although the aforementioned studies examined South Korea’s policies and services related to children during the pandemic, there is a lack of information about data collection and analysis processes. Additionally, the term children, is used loosely, rather than focusing on early childhood. Given that the pandemic is still ongoing, more rigorous research and evidence related to the impact of the COVID-19 pandemic on young children are required to better equip early childhood educators and families to cope with constantly changing and increasingly complex problems related to COVID-19.

The Whole Child Approach

This study takes a Whole Child approach in order to examine and analyze South Korea’s policies and services that have supported ECEC during the pandemic. The Whole Child approach, which positions the collaboration between learning and health as fundamental and integral, while emphasizing the importance of ensuring a safe and supportive learning environment for children’s well-being and success, provides a valuable framework for this overview of South Korea’s supports toward ECEC during the COVID-19 pandemic, which has posed great threats to children’s health and education.

In the field of ECEC, Joanna Hendrick (1988) initially used the term “whole child” to explain practical methods that foster young children’s healthy development, picturing the child as having multiple selves—the cognitive, emotional, social, physical, and creative. In line with Hendrick’s holistic approach to child development and learning, the Association for Supervision and Curriculum Development (ASCD) launched a Whole Child Initiative in 2007 to help change a school’s focus on achieving narrowly defined academic success to attaining the long-term development and life success of all children (ASCD, 2007). According to ASCD, a Whole Child approach means that each student:

- Enters school healthy and learns about and practices a healthy lifestyle;
- Learns in an environment that is physically and emotionally safe for students and adults;
- Is actively engaged in learning and is connected to the school and broader community;
- Has access to personalized learning and is supported by qualified, caring adults; and
- Is challenged academically and prepared for success in college or further study and for employment and participation in a global environment.

Understanding the interrelationships among all areas of development and the combinational impact of instructional, relational, and environmental factors on children’s learning serves as a foundational premise that undergirds a Whole Child approach (ASCD, 2020; Darling-Hammond & Cook-Harvey, 2018). Table 2 presents the five tenets and each tenet’s indicators, which are closely related to ECEC and applicable particularly to this pandemic situation.

Over the years, ASCD has developed an array of resources (e.g., blog, newsletter, publication, symposium) to support educators in implementing a Whole Child approach to education. The research findings indicate that the Whole Child approach leads to students’ positive social-emotional and behavioral outcomes, and overall positive changes in school climates (ASCD, 2020; Darling-Hammond & Cook-Harvey, 2018; Griffith & Slade, 2018; Slade & Griffith, 2013). In a recent article about learning in the time of COVID-19, Darling-Hammond et al. (2020) re-emphasized a focus on the whole child while reimagining, rethinking, and redesigning education in the time of COVID-19 and beyond. Although the Whole Child approach was originally launched in the United States, it has become one of the widely adopted initiatives in the field of education across the United States, Europe, and Oceania (Slade & Griffith, 2013). Coupled with the key aspects of South Korea’s national-level early childhood curriculum (the Revised Nuri Curriculum) that promotes child-based, holistic development, the Whole Child approach provides a powerful lens for framing this study as well as a useful analytic tool for exploring the priorities embedded in South Korean government and organizations for supporting ECEC.

Methods

Data Collection

Data were collected during the first 6 months of the COVID-19 pandemic, from the beginning of the outbreak...
in February 2020 to early August 2020, and were contained in two, separate datasets. We developed the first dataset to examine the government’s early childhood educational responses related to the pandemic. The dataset 1 included press releases (n = 62), research studies (n = 6), and operation and management guidelines (n = 16) published by the MOE, the MOHW, and other relevant government sectors such as Ministry of Gender Equality and Family, Ministry of Employment and Labor, Korea Institute of Child Care and Education, Central Disaster and Safety Countermeasures Headquarters, and Ministry of Environment. These documents were retrieved directly from the above-named organizations' websites, using the following keywords: early childhood, children, COVID-19, school closure, education, care, policy, kindergarten, and child care center. We initially identified a total of 96 documents related to supports for ECEC. Of the 96 documents, we retained 84 after excluding documents containing ECEC-related policies, research, and guidelines that were developed without specific consideration of the pandemic.

The second dataset included responses by the directors of 17 kindergartens and 13 child care centers in Seoul and Gyeonggi Province. Given that Seoul and Gyeonggi province have the largest number of COVID-19 confirmed cases and deaths in South Korea, we recruited directors of early childhood institutions located in those two metropolitan areas, considering the types and sizes of institutions to examine institutional-level supports and needs during the pandemic. Participants were recruited in early August of 2020 through our research team’s personal contacts. The final sample included 6 public and 11 private kindergartens, and 8 public and 5 private child care centers. In the sample, 15 (out of 17) kindergartens enrolled between 50 and 150 students, while 10 (out of 13) child care centers enrolled between 50 and 150 children. Additionally, all participants were female, and 16 (out of 17) kindergarten directors had more than 10 years of educational (teaching/leadership) experiences, while 9 (out of 13) child care center directors had more than 10 years of educational experiences. Based on the five tenets and indicators of the Whole Child approach, 15 open-ended questions were developed for the online survey (See Appendix A). The survey included questions related to how the directors managed their institutions and supported children and families in response to the government’s guidelines. A direct link to the survey was created using Google Forms software; a brief explanation of the project and an informed consent form were initially sent to 33 directors of early childhood institutions in Seoul and Gyeonggi province via e-mail. Survey responses from 30 directors were collected by the end of August, yielding a response rate of 91%.

### Data Analysis

This study applied a deductive, qualitative content analysis method to examine and analyze meanings and themes of texts (documents and survey responses) and their specific contexts (South Korea) (Zhang & Wildemuth, 2009). Content analysis was employed for making replicable and valid inferences from data to the contexts, thus providing

---

**Table 2** A summary of tenets and selected indicators of a whole child approach

| Tenets | Indicators for the ECEC context during the pandemic |
|--------|---------------------------------------------------|
| Healthy | Supporting and reinforcing the health and well-being of each student  
|         | Addressing the physical, mental, emotional, and social dimensions of health  
|         | Collaborating with parents and the local community to promote the health and well-being of each student |
| Safe    | Providing safe, friendly, and student-centered physical, emotional, academic and social environment  
|         | Providing opportunities to practice socio-emotional skills  
|         | Helping students feel valued, respected, and cared for and are motivated to learn |
| Engaged | Using active learning strategies  
|         | Using a range of inquiry-based, experiential learning tasks and activities to help all students deepen their understanding of what they are learning and why they are learning it  
|         | Working closely with students to help them monitor and direct their own progress |
| Supported | Promoting an individualized learning  
|           | Using a range of assessment tasks to monitor student progress, and provide timely feedback |
|           | Helping all families understand available services, advocate for their children’s needs, and support their children’s learning |
| Challenged | Providing challenging, comprehensive curriculum in all content areas  
|            | Providing opportunities for students to develop critical-thinking and reasoning skills, problem solving competencies, and technology proficiency  
|            | Provides cross-curricular opportunities for learning with and through technology |

*Source* ASCD (2020)
knowledge, new insights, understanding of specific phenomena like COVID-19, and a practical guide to action (Krippendorff, 2018). Qualitative content analysis enabled us to explore the meanings underlying physical messages of policy documents and survey responses, and to understand the pandemic-related governmental and institutional responses in a more “subjective but scientific manner” (Zhang & Wildemuth, 2009, p. 1). In this sense, qualitative content analysis has been used widely in policy-related research (Gagliardi et al., 2020; Raoofi et al., 2020) including this present study. The process of our content analysis involved three phases: preparing, organizing, and reporting, as described by Elo and Kyngäs (2008). In the preparation phase, we used a deductive approach to form ideas and design this research study based on the selected conceptual framework, the whole child approach, prior to collecting and analyzing data (Elo & Kyngäs, 2008; Miles et al., 2013). Then, we collected data as described in the previous section; read through the collected data multiple times to obtain a sense of the whole picture of supports for ECEC in South Korea during the pandemic; and selected the units of analysis (Dataset 1: government document; Dataset 2: kindergarten and child care center surveys).

During the organizing phase, deductive codes were derived from the Whole Child approach’s tenets. Each government document and survey response was reviewed for content, and coded for correspondence to the five categories (healthy, safe, engaged, supported, and challenged). Two early childhood educators on the research team separately read and coded the documents and survey responses. If data addressed contents that corresponded to multiple codes, each of the two raters determined the major focus area of the document or survey response, and coded accordingly. For the survey responses, the raters copied and pasted the pas4 that contained ideas related to the codes into separate files for each code, and labeled each excerpt with the respondent’s institution type, such as kindergarten (K) or child care center (C). To ensure a “continuous dialogue between researchers to maintain consistency of the coding” (Walther et al., 2013), inter-rater reliability between the two raters was measured by Miles and Huberman’s (1994) formula—dividing the number of agreements by the total number of agreements plus disagreements, and reached 91% agreement. The two raters’ codes were then reviewed by a policy expert on the research team, and in cases of disagreement, the reviewer finalized the major focus area of the government document. Note that in order to more accurately capture and understand the meanings, we initially analyzed data from the government documents and the survey responses in the original language (Korean), and translated them into English after the initial coding process. Two researchers who are proficient in both languages reviewed the translations to ensure that the original meanings were preserved.

As for the reporting phase, the results of this study are presented below by the contents corresponding to the five categories of the Whole Child approach.

**Results**

**Analysis of Datasets 1 and 2**

We analyzed datasets 1 and 2 by using the Whole Child approach and its five tenets—Healthy, Safe, Engaged, Supported, and Challenged. Dataset 1 was comprised of press releases, research studies, and operation and management guidelines \(n=84\) established by the MOE, the MOHW, and other relevant government sectors. The analysis indicated that among the five tenets of the Whole Child framework, Supported \(n=34; 40\%\), relating to supporting families in the transition to distance learning, and Safe \(n=32; 38\%\), pertaining to supporting of safe learning environments, were the most frequently addressed in policy responses, followed by Healthy \(n=10; 12\%\), which relates to supporting children’s physical, emotional, and social health via education, and Engaged \(n=7; 8\%\), which relates to providing support for children’s effective and proactive learning. Challenged \(n=1; 1\%\), relating to supports for comprehensive curriculum management and for children’s critical thinking and problem solving, appeared least frequently in the policy responses. Additionally, we analyzed Dataset 2, which was an online survey with 30 respondents comprising 17 kindergarten directors and 13 child care center directors in Seoul and Gyeonggi Province. Table 3 shows a summary of the results from the content analysis using the Whole Child conceptual framework. The results of the combined analyses of Datasets 1 and 2 are presented by the five tenets of the Whole child approach in the following section.

**Tenet 1: Healthy**

**Policy Responses and Measures**

Our analyses of public documents related to children’s health revealed that prevention protocols and school operational guidelines were established to support children’s physical health. For example, kindergartens and child care centers were ordered to conduct daily prevention education and monitoring of sanitation, based on the prevention protocols and school operational guidelines provided by the MOE and the MOHW.

Many government policy measures were also taken to ensure children’s mental health. For one, the Korean Institute of Child Care and Education conducted national research studies to find ways to support children’s mental health in a time of confusion, and published resources such as...
Table 3 Overview of the results

| Whole child tenets | Policies and government responses | Document sources (n = 84) | Institutional responses | n (%) | Kindergarten (n = 17) | Child care center (n = 13) |
|-------------------|----------------------------------|--------------------------|-------------------------|-------|-----------------------|---------------------------|
| Healthy           | Prevention protocols and school operational guidelines | 10 (12%) | Health education sessions for children | 17 (100) | 13 (100) |
|                   | Manual for supporting young children’s psychological health | 4 press releases | Participation of teacher training programs | 12 (70) | 9 (69) |
|                   | Counseling and therapy support | 2 research studies | Emphasis on protecting ourselves and others | 11 (65) | 5 (38) |
|                   |                                | 4 guidelines | Activities for developing respect and care | 10 (59) | 3 (23) |
|                   |                                |                       | Acknowledging children’s discomfort | 6 (35) | 4 (30) |
|                   |                                |                       | Emotional support via music and other media | 2 (12) | 2 (15) |
|                   |                                |                       | Utilizing emotional support program | 2 (12) | – |
| Safe              | Postponement of school opening | 32 (38%) | Sanitation management via child-friendly visual guides | 17 (100) | 13 (100) |
|                   | Guidelines on school opening; attendance, social distancing, and disinfecting | 18 press releases 3 research studies | Needs and concerns: insufficient supplies of health products; lack of concrete guidelines; irresponsiveness to teachers’ voices | 11 (65) | 7 (54) |
|                   | Monitoring of disease control and operations | 11 guidelines |                                                        |       |                       |
| Engaged           | Curriculum support for children and teachers | 7 (8%) | Learning support via various modalities | 14 (82) | 4 (30) |
|                   | Online resources for home-based learning and play activities | 6 press releases 1 guideline | Real time distance learning via Zoom | 8 (47) | – |
|                   |                                |                       | SNS platforms to share children’s learning | 11 (65) | 3 (23) |
|                   |                                |                       | Play packet | 15 (88) | 1 (7) |
|                   |                                |                       | Discussion about pandemic | 10 (59) | 7 (54) |
| Supported         | Financial support: childcare allowance and school fees | 34 (40%) | Partnering with families to assess children’s learning | 4 (24) | 1 (7) |
|                   | Child care support: emergency childcare service; child care subsidy; home visiting childcare services; paid family care leave | 33 press releases | Reduced attendance and children’s solo play more careful observation, better understand every child’s needs | 17 (100) | 13 (100) |
|                   | Diverse family support: itinerant teachers’ visits to assist children’s online learning; possible long-term support plans for disadvantaged families | 1 research study | Multimodal communication with families | 7 (41) | 11 (85) |
|                   |                                |                       | Lack of time and support for tailored teaching and individualized learning |       |                       |
| Challenged        | Preparing for the changes of time; revamping the curricula and education system to ensure the continuity in children’s learning and growth | 1 (1%) | Difficulties in fully operating the Revised Nuri curriculum | 10 (59) | 9 (69) |
|                   |                                | 1 press release | Limited opportunities for promoting children’s higher order thinking | 7 (41) | 7 (54) |
as the Manual for Supporting Young Children’s Psychological Health. The Ministry of Gender Equality and Family also secured additional funding to offer psychological counseling and therapy support for children in vulnerable families and for those experiencing various maladaptive issues. Furthermore, the ministries collaborated with the medical field and the Korean Children Welfare Association, to ensure young children’s psychological well-being and healthy development.

Support and Services Provided by Early Childhood Institutions

In the midst of the pandemic, providing health-related appropriate support was a high priority at both kindergartens and child care centers because of their direct contact and work with children and families. Both institutions focused on institution-wide support for physical health; health education sessions were regularly provided at every kindergarten and child care center. The main goals of health education were to raise children’s awareness on the importance of maintaining healthy habits and to help children develop self-care skills. Twelve kindergartens (70%) and 9 child care centers (69%) indicated that they implemented the government-issued guidelines related to health education, and attended teacher training programs sponsored by the government. The analysis of open-ended survey items also showed various kinds of support provided to early childhood programs. For example, one director of a kindergarten program shared the nature and content of a teacher training program that she attended. Here is an excerpt from her response:

We participated in health education related to social distancing that was organized by the city office. We watched video clips, which lend some useful information such as greeting each other while keeping a safe distance. The contents were child-friendly and developmentally appropriate. We discussed how we could apply these in our classrooms. (Director, Child care center, (C))

In order to promote children’s social health, creating an atmosphere for respect and care was considered to be essential. To promote children’s community spirit, 11 kindergartens (65%) and 5 child care centers (38%) described that they emphasized to children that following the prevention guidelines (e.g., wearing a face mask and practicing social distancing) was not only for each child’s own health but also for other people’s well-being. In addition, teachers at 10 kindergartens (59%) and 3 child care centers (23%) initiated various activities to help children develop care and love for their classroom members and community. For example, children composed a song as a class and sent a video message to their peers who were unable to attend, and children collectively decorated facial masks and sent them with cards to community workers and senior citizens in nursing homes.

Moreover, kindergartens and child care centers supported children’s emotional health in varied ways, including acknowledging the discomfort that children may feel (6 kindergartens (35%); 4 child care centers (30%)), providing physical comfort when needed (3 kindergartens (18%); 2 child care centers (15%)), providing emotional support via music and other forms of media (2 kindergartens (12%); 2 child care centers (15%)), and utilizing emotional support programs (2 kindergarten (12%)). One kindergarten shared,

It is hard to see other person’s facial expressions with the face masks on. So we encouraged children to use their words to show love and care for each other, and also provided for children activities that helped develop emotional regulation and emotional stability. (Director, Kindergarten, (K))

Tenet 2: Safe

Policy Responses and Measures

In response to the pandemic, the government delayed the opening of kindergartens and child care centers, while ensuring that all facilities and institutions followed the cleaning and disinfecting protocols for the safety of children and educators. During school closures, the MOE and the MOHW regularly updated guidelines for kindergartens and child care centers, respectively, with regard to safe re-opening. The guidelines announced by the MOE and MOHW to create a physically safe environment at the early childhood institutions focused on three major areas: attendance, social distancing, and disinfecting. Attendance was capped at one-third—children were divided into three groups, and each group attended the school two assigned days a week; every individual was to maintain a distance of six feet from one another throughout the day; and each school was mandated to have detailed cleaning and disinfecting plans.

The MOHW also reviewed and monitored the prevention measures over a 2-month period, while government-sponsored policy research was conducted by the Korean Institute of Child Care and Education to monitor and analyze the current status of early childhood institutions and their responses to the COVID-19 related guidelines. The Central Disaster and Safety Countermeasures Headquarters and the Ministry of Environment also continued to issue relevant guidelines and protocols for early childhood institutions to ensure safe operation.
Support and Services Provided by Early Childhood Institutions

Early childhood institutions provided services to ensure the safety of children and staff. Along with the government’s supports, the institutional services also focused on providing safe and child-friendly physical environments.

In order to set up safe learning environments for children, all kindergartens and child care centers indicated that they followed the government’s guidelines regarding sanitation management such as temperature checks, wearing of face masks, and using alternative seating arrangements. Every institution also described how they provided child-friendly visual guides (e.g., safety posters, footprint marks, and colored lines on the floor), which encouraged the children to effectively wash their hands and practice social distancing by themselves, and also helped them feel comfortable despite some changes.

However, the support measures related to ensuring a safe learning environment provided by the government were overall deemed insufficient in the field. Eleven kindergartens (65%) and 7 child care centers (54%), mostly private institutions, expressed needs and concerns regarding the following: insufficient supplies of health products, lack of concrete guidelines that reflect the realities of early childhood institutions, irresponsiveness to teachers’ voices, and not taking more proactive prevention measures. Some responses from the directors are as follows:

We have to provide face masks for teachers and staff members, and we also often provide masks for children when theirs get lost or torn during play. We keep checking children’s temperature, and so we spend quite a bit on non-contact temperature assessment devices, which is burdensome. It would be helpful if we got support for this equipment. (K)

In some cases, the guidelines do not exactly reflect the field. For example, it is written that ‘teachers must not take off their facemasks and eat with children at lunch’ but teachers have to eat with children and provide support. There is not a separate time allocated for teachers’ lunch. (C)

Tenet 3: Engaged

Policy Responses and Measures

As the pandemic continued, the re-opening of educational institutions was postponed and virtual schools opened for children. This change forced the government to quickly set up plans and support systems for online school operation.

The MOE recommended a wide range of learning modalities to provide play and learning activities for ensuring learning continuity during the time of school closure. Although no national-level curricula adjusted for distance learning were offered to kindergarten and child care centers, the MOE created the web portal titled ‘i-Nuri’ (i-nuri.go.kr) in collaboration with Korea Institute of Child Care and Education to provide curriculum plans as well as ideas for different play activities based on the Revised Nuri Curriculum. Additionally, online resources for home-based learning and play activities were made available on various government websites, including 17 Metropolitan and Provincial Offices of Education; 16 Early Childhood Education and Promotion Centers (under the supervision of MOE); 18 Support Centers for Child Care (under the aegis of MOHW); the Korean Educational broadcasting system (EBS); and other early childhood websites managed by the Metropolitan & Provincial Offices of Education.

Support and Services Provided by Early Childhood Institutions

Kindergartens and child care centers sought to provide opportunities for learning and play so that children could actively engage in learning activities online and offline during the pandemic. Both kindergartens and child care centers also provided emergency care services during the closure, but at child care centers, in particular, the attendance rate for this service reached up to 70% by the end of May (MOHW, 2020). Thus, distance learning was mostly operated in kindergartens.

Fourteen kindergartens (82%) and 4 child care centers (30%) supported play and learning via various modalities (e.g., teacher-created videos, clips provided by the Metropolitan and Provincial Offices of Education, and other relevant resources offered on various educational websites). Eight kindergartens (47%) utilized Zoom to engage in real time distance learning, and 11 kindergartens (65%) and 3 child care centers (23%) used SNS platforms such as Facebook and Naver Band to share and communicate children’s learning and play. Here is an example:

Children wished to have their videos uploaded onto the kindergarten website so that others could see. Teachers and parents made comments on the postings and actively communicated about children’s accomplishments. This helped parents to understand more about children’s play, and children also were able to expand their learning as they could see how other friends used the same play packet in their own unique ways to generate different results. (K)

In addition, play packets were distributed at 15 kindergartens (88%) and 1 child care center (7%) to promote children’s
learning through play and hands-on activities. The content of the play packets varied greatly by institutions (e.g., growing kits for tomatoes and beansprout to try at home, arts and craft materials for making Mother’s Day cards, and materials for building toy airplanes). Participants’ written responses also showed that parents perceived these as helpful and appreciated receiving these packets.

We put together various materials and created two- to three- weeks-worth play packets to deliver to children’s homes. We decided to take the drive-through approach to meet children and their families. Alongside the learning materials, we also distributed video clips that show how to utilize the materials. Children and parents alike seem to feel that they are being cared for, and parents consider these activities to be emotionally enriching for their children. (K)

Lastly, 10 kindergartens (59%) and 7 child care centers (54%) made active use of the current pandemic situation and incorporated it into discussions, so that children could learn new information and develop a better understanding of the world. One child care center director shared,

Amid the ongoing COVID-19 crisis, we saw that many children started to take interest in COVID-19. We decided to discuss it to help children’s understanding. For example, children watched the news report about COVID-19 with their families and afterwards discussed the disease and prevention measures at the care center. To expand learning, we conducted simple experiments to understand about germs and shared the importance of handwashing. (C)

**Tenet 4: Supported**

**Policy Responses and Measures**

The MOE, the MOHW, and other government organizations enacted policy measures to alleviate parents’ burdens related to child care as well as to guarantee continuity of quality education for all children. The MOHW continued to provide financial assistance to cover the full cost of child care centers for families, while the MOE provided income support (worth approximately 200 USD) each month to help families pay for kindergarten tuitions. Along with the tuition assistance, families with children under age 6 received child care subsidy vouchers (worth approximately 350 USD) during the pandemic. Additionally, home visiting childcare services (childcare professionals visiting the family to provide childcare service) were funded with benefits that varied by income levels.

Particularly noteworthy was a new policy implemented by the Ministry of Employment and Labor that offered up to 15 days of paid family care leave for parents of children under age 6 employed at small/medium-sized companies (and up to 10 days for parents employed at corporations and public institutions) to minimize the care gap during the pandemic. The parental leave system as a whole was also restructured to provide up to 90 days of parental leave by 2021, while paternal leave was to be more actively promoted.

Moreover, a considerable number of policies were passed for supporting low-income families and marginalized groups. In order to support children in multicultural families, single-parent families, and families with both parents working full-time, for instance, the Ministry of Gender Equality and Family collaborated with the Korea Institute for Healthy Family and Multicultural Family Support Centers to set up itinerant teachers’ visits to assist children’s online learning. This measure was taken to prevent the widening of learning gaps during the pandemic. The Ministry of Gender Equality and Family also organized four public forums to assess the pandemic-induced difficulties that families were experiencing, and to discuss possible long-term support plans for families, including at-risk and vulnerable families.

**Support and Services Provided by Early Childhood Institutions**

Kindergartens and child care centers sought ways to support and meet the different needs of individual children and their families. First, both institutions used various modes of assessment on children’s learning. During distance learning, it was particularly important to partner with families to learn more about children’s understanding, interests, and needs. At 15 kindergartens (88%) and 1 child care center (7%), teachers invited family members to share their observations about children’s learning and play at home using an agreed-upon mode of communication (e.g., phone call, video chat, email, or text). During face-to-face learning, seating was spread out for children to sit as far apart as possible at tables, and children were only allowed to be engaged in solo play in their assigned seat. Some positive aspects of such classroom settings were noted by 4 kindergartens (24%) and 1 child care center (7%). For example, teachers were able to make more careful observations of each child’s choice of play materials and interaction with the materials, which helped the teachers better understand each child’s strengths and needs.

Second, kindergartens and child care centers placed stronger emphasis on family support during the pandemic. All kindergartens and child care centers utilized media and modalities (e.g, kindergarten webpage, Kid’s Note (the parent-teacher communication app), on-call counseling) to communicate with parents on a regular basis for having open dialogue about confusion and needs in the COVID-19 era. Directors shared various communication measures as follows:
We used non-contact communication such as school newsletters, text messages, phone calls, and Kid’s Note to share information more frequently in detail. This was to help parents who may need extra guidance and support. (C)

The Parent Association served as an arena for communication. We also made conference calls to discuss children’s adjustment to attending the institution every other day, play activities, social development and such. We also launched an online parenting education program and afterwards communicated via comments on postings. (K)

Third, although both institutions were aware of the importance of individualized support for children with special needs, and children from multicultural and low-income families, actual provision and support varied greatly. With distance learning and emergency care services happening all at once, there was not enough time and resources at the kindergartens and child care centers for tailored service. Thus, there was acknowledgement among 7 kindergartens (41%) and 11 child care centers (85%), on the need for additional staffs and specialized support for providing individualized learning.

Tenet 5: Challenged

Policy Responses and Measures

Public policies and measures regarding the Challenged tenet were minimal compared to others. While the MOE initiated nine public forums on the subject of post-COVID education renovation, one public forum in particular generated recurring themes regarding the future direction of South Korea’s ECEC, including the revamping of curriculum organization, proactive responses to the changing times, as well as reform of the education system to ensure children’s continuous learning. These themes then suggest that a wide range of issues and priorities remain for South Korea’s ECEC; these range from disease prevention, to children’s health and safety, and to reduction of learning gaps.

Support and Services Provided by Early Childhood Institutions

Ten kindergartens (59%) and 9 child care centers (69%) found it difficult to provide holistic learning experiences for children, which come through play activities. Children’s inconsistent attendance due to the pandemic and the use of online learning resources naturally limited the full operationalization of the Revised Nuri curriculum. For example, a child care center director had mentioned,

Teachers seemed to feel lost in terms of offering comprehensive curriculum as they could not provide ‘play-centered, holistic experience’ emphasized in the Revised Nuri Curriculum during this unpredictable period. (C)

Seven kindergartens (41%) and 7 child care centers (54%) also indicated their challenges for providing children the opportunities to engage in problem solving or collaborative learning. Kindergartens were better able to offer activities for fostering children’s high order thinking (i.e., group projects about historical epidemics and prevention, discussion about good hygiene and safety practices and ways to solve the problems), while child care centers showed less or none of the attempts to provide those opportunities as the attendance rate was much higher (due to emergency childcare services) and thus, their focus had to be more on ensuring that every child was well cared for.

Discussion and Implications

By adopting the Whole Child approach, this study used a holistic lens to analyze how South Korean government and educational institutions supported young children and their families during the first 6 months of the pandemic.

The findings revealed that the South Korean government policies and guidance for ECEC were, overall, comprehensive in scope. They not only focused on disease prevention and the provision of safe learning environments, but also on ensuring children’s health, well-being, and learning at home. Despite the confusion and challenges of the pandemic, both kindergartens and child care centers dutifully followed the government-issued guidelines and postponed their opening, providing remote schooling or emergency childcare service systems to support the continuity of education and care. These findings corroborated previous research findings demonstrating teachers’ new roles in ensuring a smooth transition to a distance/hybrid learning model (Lee & Shin, 2020; Samuelsson et al., 2020), and effective implementation of early childhood institutions’ response strategies in South Korea (Byun & Slavin, 2020; Choi, 2020).

The findings also showed early childhood institutions’ challenges and needs regarding the government’s guidelines that lacked adequate consideration for institutions’ varied situations (e.g., higher demands for emergency childcare services, longer learning hours, and lower enrollment), and insufficient support for safety-related products and expenses. Given that those concerns were reported mostly by private institutions in this study, a thorough and comprehensive examination of early childhood institutions’ different conditions in responding to COVID-19 as well as advanced and tailored planning in preparation,
response, and support for future emergencies are critical. Additionally, the governmental and institutional supports need to be interpreted with the awareness that the quality of education and related services during the pandemic can vary greatly depending on each institution’s budget, infrastructure, and human resources (Park et al., 2021).

The analysis based on the five tenets of the Whole Child approach revealed that South Korea’s policy responses and services for ECEC during the pandemic focused mainly on the ‘Safe’ and ‘Supported’ tenets, while ‘Challenged’ was given the least amount of consideration. This finding suggests the need for a more multifaceted policy response and services to promote children’s development and learning in both the current and post-COVID eras. In the case of the ‘Challenged’ tenet, there were many limitations for teachers to provide creative and challenging learning environments and activities for fostering children’s creativity and higher-level thinking skills due to frequent school closures and the transition to virtual schooling (Kim et al., 2020; Park & Bae, 2020). Under these circumstances, the government’s limited guidance related to reinforcing a challenging, comprehensive curriculum should indeed be acknowledged; however, early childhood educators and parents could also use this unprecedented time as an opportunity to equip children with critical thinking and problem solving skills through navigating the uncertainties together (Seale, 2020).

In addition, the results in the ‘Healthy’ and ‘Safe’ tenets indicated that government supports in these areas mostly focused on ensuring physical health and creating a physically safe learning environment, with limited attention paid to ensuring the social and emotional aspects of health and the learning environment. Although the government’s measures to support children’s mental health were presented in documents, it was difficult to determine to what extent kindergartens and child care centers actually accessed and implemented those resources since the institutions’ priorities focused on physical health and safety. Indeed, none of the institutions mentioned specific experiences related to monitoring and supporting children’s or parents’ mental health. It is noteworthy that increased stress and burdens, prolonged school closures, and social isolation resulting from the pandemic have increased child abuse cases by 19.4% in South Korea (Korea Child Abuse Prevention Association, 2020), and are likely to have negatively impacted children’s social, emotional, and mental well-being (Chun & Kim, 2021; World Health Organization, 2020). Thus, more policies with concrete guidance including strengthening families’ economic and mental supports, and implementing virtual home visitation practices during the pandemic (Welch & Haskin, 2020) are essential to help ensure that children experience socially and emotionally safe relationships and environments.

Meanwhile, the findings related to the ‘Supported’ tenet indicated that the government established plans for protecting children in disadvantaged families who may be more at-risk. Particularly noteworthy in ensuring continuity of children’s learning and development were the government’s policies related to emergency childcare services as well as financial assistance and income support to help cover education-related expenses. The early childhood institutions included in this study, however, expressed the need for more detailed guidelines, clearer eligibility standards, and additional staff to be able to offer individualized services for children with special needs, children from multicultural backgrounds, and children from disadvantaged families. Thus, it is important for the South Korean government to identify where support is needed most, and consider providing proactive intervention, monitoring, and additional support for those who are more vulnerable than others. For example, by developing policies and systems to ensure that every child, particularly those from disadvantaged households, is provided with access to digital devices and connectivity, safe and accessible childcare, and nutritious food (Chun & Kim, 2021; Darling-Hammond et al., 2020; Gromada et al., 2020), South Korea’s government can take steps to prevent widening inequalities in children’s health and education during the pandemic.

Lastly, the differences in the response measures taken by the kindergartens and child care centers highlighted the separate nature of ‘education’ and ‘care’ in South Korea’s early childhood system. As the findings indicated, kindergartens—child care centers—which continued to serve children via emergency child care service—had to emphasize care over education. Although both types of institutions used the Revised Nuri-Curriculum, they differed in the actual management and operation of the curriculum due to the differences in the age groups they serve, learning hours, and the attendance rate for emergency child care service. Thus, the analysis suggested that a more organized and systematic government’s intervention plans and curriculum guidelines in the COVID-19 era and beyond are needed to minimize confusion and maximize learning opportunities at both institutions.

Strengths, Limitations, and Future Research

This study has several strengths. First, this study examined an under-investigated area, namely, South Korea’s supports toward ECEC in the COVID-19 era, and provided critical insights into existing, comparative strategies for how to protect children and their educational opportunities during the pandemic. Another particular strength of this
study was the use of the Whole Child conceptual framework, which enabled us to effectively analyze the strengths and gaps in South Korea’s policies and practices during the pandemic, and to provide recommendations for education policymakers and other stakeholders. Furthermore, this study combined a rigorous policy document analysis with a survey from early childhood institutions. The use of multiple methods and analyses of these two levels of responses during the pandemic offered a more thorough picture of South Korea’s ECEC situation.

Despite its strengths, some limitations to this study should be addressed. First, as this study focused primarily on examining types and priorities among supports offered by South Korea’s government and early childhood institutions using the Whole Child approach, the findings cannot reveal the extent to which policy measures and institutional supports were effectively implemented and successfully guided children and their families in fulfilling their needs during the pandemic. Additionally, the findings may suffer from bias in the respondents’ self-reports, which might result in inconsistencies between what the respondents reported and what they actually thought and did. As directors, they might have felt obliged to make positive comments about their institutions’ supports for their students and families. Therefore, by conducting in-depth interviews with not only directors, but also teachers, children, and parents, future research can provide a more extensive understanding of how COVID-19 has impacted ECEC in South Korea. Second, the online survey was completed by 30 directors of public and private early childhood institutions located in Seoul and Gyeonggi Province, with the majority of the institutions having between 50 and 150 in enrollment. Thus, the findings cannot be representative of ECEC institutions’ experiences in those two metropolitan areas, nor other institutions across South Korea. Future research can examine early childhood institutions from different contexts (e.g., size, location, SES) since their implementation of governmental supports and challenges may differ from those of the institutions in this study.

In addition, the results of this study also indicated that there was limited governmental and institutional support and guidance for children’s psychological health. As noted by the World Health Organization (2020), this pandemic is most likely to have long-term negative consequences on children’s mental, social, and emotional well-being. It is also conjectured that the impact on children’s psychological health could be more severe than other observable areas, considering the young children’s limited means of expression. Thus, further research that examines the pandemic’s short- and long-term consequences for young children’s psychological health is needed.

Given that young children are more vulnerable during emergency situations like COVID-19 (Yoshikawa et al., 2020), multilateral cooperation among individuals, schools, communities, and even countries to find additional ways to effectively support children’s holistic well-being amid the COVID-19 pandemic must be continued.

Appendix A: Online Survey Questions

Healthy

1. What actions have been undertaken to support children’s physical, social, emotional, and mental health and well-being during the pandemic?
2. What kinds of supports and guidelines has the government (MOE or MOHW) provided to support the management and operation of these actions in your institution?

Safe

3. What actions have been undertaken to provide a child-centered, safe and friendly learning environment during the pandemic?
4. What kinds of supports and guidelines has the government (MOE or MOHW) provided to support the management and operation of these actions in your institution?

Engaged

5. What instructional resources has your institution been able to use to support children’s learning during the school closure? (e.g., distance learning, play packets, parent and family support, childcare services)
6. Has your institution tried to implement any topics related to the COVID-19 pandemic into any learning activities for children? If yes, please describe.
7. What kinds of supports and guidelines has the government (MOE or MOHW) provided to support the management and operation of these actions in your institution?

Supported

8. In what ways has your institution assessed children’s learning during this pandemic? In what ways has your institution provided personalized feedback on children’s learning?
9. What actions have been undertaken to support children and families and to improve teacher-parent communication?

10. What specific actions has your institution been able to use to support particularly children and families from disadvantaged backgrounds during this pandemic? (e.g., children with special needs, children from multicultural backgrounds, and children from low-income families)

11. What kinds of supports and guidelines has the government (MOE or MOHW) provided to support the management and operation of these actions in your institution?

Challenged

12. What actions have been undertaken to develop and implement a comprehensive curriculum during this pandemic?

13. What actions have been undertaken to promote children’s critical thinking and problem solving skills?

14. What kinds of supports and guidelines has the government (MOE or MOHW) provided to support the management and operation of these actions in your institution?

Suggestion

15. Are there any suggestions or requests that you would provide to the government (MOE or MOHW) during this pandemic? What kinds of additional supports do you think would help your institutions support children and their families during this pandemic?

References

Byun S, Slavin RE (2020). Educational responses to the COVID outbreak in South Korea. Best Evidence in Chinese Education, 5(2), 665–680.

Choi, Y. K. (2020). Kindergarten and daycare response system check and status analysis in COVID-19. Korea Institute of Child Care and Education, 65, 6–19.

Chan, J. S., & Kim, J. (2021). Child welfare policies and services during the COVID-19 pandemic in South Korea. Asia Pacific Journal of Social Work and Development, 31(1–2), 38–44. https://doi.org/10.1080/02185385.2020.1859407

Darling-Hammond, L., & Cook-Harvey, C. M. (2018). Educating the whole child: Improving school climate to support student success. Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/product-files/Educating_Whole Child_REPORT.pdf. Accessed 27 December 2020.

Darling-Hammond, L., Schachner, A., & Edgerton, A. K. (2020). Reinventing school in the COVID era and beyond. Learning Policy Institute. https://learningpolicyinstitute.org/blog/covid-reinventing-school. Accessed 27 December 2020.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. Journal of Advanced Nursing, 62, 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Gagliardi, A. R., Dunn, S., Foster, A. M., Grace, S. L., Khanlou, N., Stewart, D. E., & Strauss, S. E. (2020). Is patient-centred care for women a priority for policy-makers? Content analysis of government policies. Health Research Policy and Systems, 18(23). https://doi.org/10.1186/s12961-020-0533-z

Griffith, D., & Slade, S. (2018). A whole child umbrella. The Promise of Social-Emotional Learning, 76(2), 36–38.

Gromada, A., Richardson, D., & Rees, G. (2020). Childcare in a global crisis: the impact of COVID-19 on work and family life (Innocenti Research Brief Report No. 2020–2018). UNICEF.

Han, S. (2020). Pre-service early childhood teachers’ educational practice experienced in the COVID-19 pandemic. The Journal of Humanities and Social science, 11(5), 1395–1408. https://doi.org/10.22143/HSS21.11.5.100

Hendrick, J. (1988). Whole child: The developmental education for the early years. Merrell College

Kim, M. J., Kim, H. Y., Kim, N. Y., & Moon, G. Y. (2020). Exploring kindergarten teachers’ perceptions of distance education for young children. Korean Journal of Early Childhood Education Research, 22(3), 201–229.

Korea Child Abuse Prevention Association (2020, September 25). Child abuse surges amid COVID-19 pandemic. https://kecapa.kr/board/read.php?table=1003&number=414&page=3&sel_cat=&sel= &search. Accessed 19 January 2021.

Korea Disease Control and Prevention Agency (2020). The first imported case of the novel coronavirus (2019-nCoV) in Korea. https://www.cdc.go.kr/board/board.es?mid=a30402000000&bid=0030&act=view&list_no=365797&tag=&nPage=1. Accessed 22 October 2020.

Krippendorff, K. (2018). Content analysis: An introduction to its methodology. Sage publications.

Lee, M. J., & Shin, J. Y. (2020). Action research for exploring the possibility of distance learning in kindergartens. Early Childhood Education Research & Review, 24(5), 277–302. https://doi.org/10.32349/ECERR.2020.10.24.5.277

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. Sage.

Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforcement regulation of the Ministry of Education (MOE). (2020). Amendment to the enforce
Park, E., & Park, S. (2015). Issues and tasks for early childhood education and care workforce in Korea. *Asia-Pacific Journal of Research in Early Childhood Education, 9*(2), 23–50. https://doi.org/10.17206/apjrece.2015.9.2.23

Park, I. S., & Bae, J. (2020). Difficulties and support needs of directors on inclusive child care centers due to COVID-19. *The Korea Association of Child Care and Education, 125*, 1–23. https://doi.org/10.37918/kce.2020.11.125.1

Park, Y. S., Kim, N. H., & Shin, M. Y. (2021). A study on the current state according to class by age of distance education in kindergartens due to COVID-19. *Early Childhood Education Research & Review, 25*(1), 225–249. https://doi.org/10.32349/ECERR.2021.2.25.1.225

Raoofi, A., Takian, A., Akbari Sari, A., Olyaeemanesh, A., Haghighi, H., & Aarabi, M. (2020). COVID-19 pandemic and comparative health policy learning in Iran. *Archives of Iranian Medicine, 23*(4), 220–234. https://doi.org/10.34172/aim.2020.02

Samuelsson, I. P., Wagner, J. T., & Ødegaard, E. E. (2020). The Coronavirus pandemic and lessons learned in preschools in Norway, Sweden and the United States: OMEP policy forum. *International Journal of Early Childhood, 52*, 129–144. https://doi.org/10.1007/s13158-020-00267-3

Seale, C. (2020). The case for critical thinking: The COVID-19 pandemic and an urgent call to close the critical thinking gap in education. *Forbes*. https://www.forbes.com/sites/colinseale/2020/04/10/the-case-for-critical-thinking-the-covid-19-pandemic-and-an-urgent-call-to-close-the-critical-thinking-gap-in-education/. Accessed 3 January 2021.

Slade, S., & Griffith, D. (2013). A whole child approach to student success. *KEDI Journal of Educational Policy, Special issue*, 21–35.

The Association for Supervision and Curriculum Development. (2020). The learning compact renewed: Whole child for the whole world. http://files.ascd.org/pdfs/programs/WholeChildNetwork/2020-whole-child-network-learning-compact-renewed.pdf. Accessed 12 December 2020.

Walther, J., Sochacka, N. W., & Kellam, N. N. (2013). Quality in interpretive engineering education research: Reflections on an example study. *Journal of Engineering Education, 102*(4), 626–659. https://doi.org/10.1002/jee.20029

Welch, M., & Haskins, R. (2020). What COVID-19 means for America’s child welfare system. *Brookings Institution*. https://www.brookings.edu/research/what-covid-19-means-for-americas-child-welfare-system. Accessed 27 December 2020.

World Health Organization. (2020). Mental Health and Psychosocial Considerations During the COVID-19 Outbreak. https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf?sfvrsn=6d3578af_2. Accessed 2 January 2020.

Yoshikawa, H., Wuermli, A. J., Britto, P. R., Dreyer, B., Leckman, J. F., Lye, S. J., Ponguta, L. A., Richter, L. M., & Stein, A. (2020). Effects of the global COVID-19 pandemic on early childhood development: Short- and long-term risks and mitigating program and policy actions. *The Journal of Pediatrics, 223*, 188–193. https://doi.org/10.1016/j.jpeds.2020.05.020

Zhang, Y., & Wildemuth, B. M. (2009). Qualitative analysis of content. In B. Wildemuth (Ed.), *Applications of social research methods to questions in information and library* (pp. 308–319). Libraries Unlimited.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.