

# Child Resilience in a Global Pandemic

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Children's development worldwide is threatened by trauma and the lived experiences of disasters, war, famine, terrorism, poverty, climate change, displacement, political violence, and pandemics (Abramson, 2020; Masten, 2013; Sciaraffa et al., 2018). Exposure to adverse childhood experiences [ACEs] – traumatic childhood events resulting from ongoing and long-term exposure to stressful life situations (Sciaraffa et al.; Spenrath et al., 2011;) – threatens the basic health and mental well-being of children (Abramson, 2020; Masten & Barnes, 2018). The 21st century has seen a vast array of traumatic events: Hurricanes Katrina and Rita, the BP Oil Spill, the 2008 earthquake in China, the 9/11 terrorist attacks, SARS, H1N1 flu, the tsunami in Southeast Asia, the Fukushima nuclear power plant melt-down (Masten, 2013), the Beirut port explosion, and current and ongoing, the Coronavirus pandemic. Unlike most crises, COVID-19 reaches every corner of the earth, making outside supports impossible for communities to attain. Another anomaly with COVID-19 is the indefinite nature of the virus, uncertainty about how it is spread, what population or age group it affects most, and what will end the ongoing trauma.

On January 9, 2020, the Chinese news media released information that researchers in China had identified a new strain of the infectious disease that was rapidly spreading – the infectious disease caused by the most recently discovered coronavirus, soon to be known worldwide as merely COVID-19 (Li et al., 2020; WHO, 2020). By the end of January, the World Health Organization [WHO] had declared the COVID-19 outbreak a Public Health Emergency of International Concern (WHO), declaring it by March 11, 2020, as a worldwide pandemic.

## How Tragedy Impacts Children and Child Development

In previous catastrophic events and the current COVID-19 pan-

dem, children's safety, cognitive development, and mental health are at risk (Abramson, 2020; Felitti et al., 1998; Golberstein et al., 2020; Masten, 2013; Sciaraffa et al., 2017; Spenrath et al., 2011). The American Psychological Association [APA] stresses the possible negative impacts of social isolation during the pandemic, citing loneliness, anxiety, depression, and post-traumatic stress disorder [PTSD] as possible outcomes of quarantine (APA, 2020). The WHO (2020) released papers detailing concerns over the pandemic's mental health and psychosocial consequences, stating that self-isolation and quarantine orders issued in countries around the world have disrupted families' normal activities, incomes, and daily routines. These factors increase depression, alcohol abuse, drug use, self-harm, and potential suicide (WHO, 2020).

Risks stemming from these stressors are compounded for the young and developing child (Felitti et al., 1998; Spenrath et al., 2011). Felitti et al. found that long-term exposure to ACEs without the support of a caring adult can severely impact the young child's developing brain and potentially lead to challenges for long-term learning, behavior, and mental and physical health. Other potential outcomes for the young child include language and attention deficits, delayed development of executive functioning and reasoning skills, lack of self-regulation, poor impulse control, oppositional behaviors, extreme emotional reactions, aggression, poor physical health, defensiveness, and difficulty processing new information (APA; Sciaraffa et al.). Early childhood professionals have long been aware of and concerned about the effects of trauma on the developing child, their consequences on the healthy, normal development of young learners, and the role developmentally appropriate practices play in supporting children through crises (Copple & Bredekamp, 2009; Pizzolongo & Hunter, 2018).

## What is Resilience?

How will our youngest and most vulnerable children overcome the impacts of trauma like the COVID-19 pandemic? Resilience is the "capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development" (Masten, 2013, p. 2). Resilience is the ability to overcome, to bounce back – toughness. It applies to living and non-living systems, including forests, economies, micro-organisms, and children and families (Gunderson et al., 2010). Many fields have adopted the term to describe how "complex systems anticipate, adapt, recover, and learn in the context of major threats, surprises, and disasters" (Masten, 2013, p. 2). Research on child resilience began as early as 1943 when Freud and Burlingham studied the psychological impacts of children affected by World War II. Their findings suggested that children

adjusted to the horrors of war with less trauma when supported by a parent during adversity (Freud & Burlingham, 1943). These findings have been corroborated by subsequent research on the impacts of ACEs on children and youth (Belsky & Feron, 2002; Bronfenbrenner, 2005; Masten; McGoron et al., 2012; Tharner et al., 2012).

Resilience has been studied widely across disciplines like psychology, psychiatry, pediatrics, and education (Masten & Barnes, 2018), identifying a multitude of individual, family, and social influences linked to disaster outcomes in children (APA, 2020; Felitti et al., 1998; Masten, 2013; Noffsinger et al., 2012; Sciaraffa et al., 2018; Spenrath et al., 2011). These findings overwhelmingly suggest that a young child's development and ability to adapt to ACEs are biological and psychological processes that happen within a series of interconnected groups, systems, and communities (Bronfenbrenner & Morris, 2006; Noffsinger et al., 2012; Walker, 2001). When coupled with the child's family, it constructs the child's ecology (Bronfenbrenner & Morris; Noffsinger et al.; Walker). These overlapping systems inform, support, or deteriorate the child's social ecology, implying that a breakdown of one system drastically impacts other systems and, ultimately, the child (Noffsinger et al.).

## Searching for Answers

In light of the challenges, this article seeks to answer the following question: "how has the COVID-19 pandemic impacted young children within social resilience frameworks, and what developmentally appropriate strategies can educators undertake to support the whole child as school systems continue to adapt?"

## The Effects of the COVID-19 Pandemic

As the COVID-19 pandemic spread across the planet, each person's life on earth was dramatically changed. Countries moved to lockdown situations whereby people were not allowed to leave their homes except to buy essential needs. People underwent mandatory and self-selected quarantines. Countries declared States of Emergency, and in most cases, all but essential needs were shut down. Schools were locked, places of worship shuttered, community centers shut down, pools vacated, lessons canceled, stores boarded up, planes grounded, and events postponed indefinitely (Golberstein et al., 2020). One of the most significant changes was the closure of school campuses, with teaching and learning moved to online formats (Decker et al., 2020). By April 2020, 188 countrywide closures were seen worldwide, and 1,576,021,818 learners were impacted by the spread of the novel Coronavirus (Xie et al., 2020).

Students and teachers were thrust into Distance Learning Models [DLM] (Decker et al., 2020; Golberstein et al., 2020). Even the youngest children learned online via various modalities. Children across the planet were removed from their school communities and classrooms without warning – plunged and plugged into online learning (Decker et al.). Children lost their human connection in classrooms, both with their classmates



Children worldwide began learning at home via technology.

and teachers. They lost playtime and story time; many lost daily lunch and breakfast. Others lost playgrounds and play and often lost their stability and routines. School closures disrupted the lives of children and their families worldwide (Abramson, 2020; APA, 2020).

## Learning at Home During Quarantine

From the introduction of distance learning in March 2020 until the end of the academic year, educators and principals began to use and learn new teaching technologies, striving (and often struggling) to deliver high-quality online instruction. When educational delivery took this drastic turn to online formats, teachers quickly learned to deliver instruction via technology (Decker et al., 2020). In hopes of minimizing school disruptions during distance learning, teachers spent countless hours designing digital instruction, answering emails, and responding to online student posts. Teachers were scrambling to provide a continuity of education for students. Schools worked relentlessly to provide services, including passing out food bags to students on free or reduced lunch programs (Decker et al.). School nurses made calls to families to check on student and family health and well-being. Principals held coffee talks with parents online to distribute information, quell fears, and answer questions. School counselors reached out to families and sent out positive coping strategies for children. Principals in some states put mobile Wi-Fi on school buses and sent them into neighborhoods so that children could access online learning modules. Schools provided laptops and devices to students who did not have access to them in their homes.

During school closures, educators and parents worldwide have been concerned with the academic progress of students during DLMs, but there looms a more considerable concern. The American Academy of Pediatrics (2020) warns of potential anxiety and depression in children during home quarantines. Perhaps with this rush to ensure learning, we neglected our primary concern as early childhood teachers – reaching, nurturing, and teaching the whole child and supporting their social ecology. While

academic learning is undoubtedly a crucial, central, and critical focus of education, our students' mental health and well-being should play an equally important role. The young child's emotional well-being should be a top priority when learning online, just as when the child is physically in a school setting.

Psychologists caution that the COVID-19 pandemic may exacerbate already existing mental health challenges – warning that we may see more depression and anxiety in children due to fears about their health and that of their families, exposure to negative messages from the media, social isolation, and family financial issues due to economic recession (Abramson, 2020; APA, 2020). All these factors converge to increase the child's risk for mental and emotional abuse (APA; Felitti et al., 1998; Golberstein et al., 2020; Masten, 2013; Noffsinger et al., 2012; Sciaraffa et al., 2018; Spennath et al., 2011). Therefore, educators and administrators must find ways to help children and families stay emotionally connected to their peers, teachers, classrooms, and the broader school community. Early childhood educators and caregivers should consider the potentially harmful physical and emotional effects that school closures have on the developing child while finding ways to mitigate these impacts on children.

## Developmentally Appropriate Classrooms Foster Resilience

Early childhood educators can take many approaches to help the young child develop protective factors (Mortensen & Barnett, 2016; Pizzolongo & Hunter, 2011), like supporting the child's capacities, helping them form secure attachments to nurturing caregivers, and giving them a sense of belonging in a nurturing community. In so doing, we can help the child develop protective skills and, ultimately, support and bolster the health and well-being of our young students living in crisis. Early childhood teachers can help the young child develop a protective barrier by incorporating developmentally appropriate practices to bolster the young child's resilience (Copple & Bredekamp, 2009; Pizzolongo & Hunter).

## A Child's Protective Barrier

Developmentally appropriate practices (DAP) are sensitive to children's individual needs and focus on teaching the whole child (Copple & Bredekamp; McKenzie, 2013). In a DAP classroom, the child has a strong, positive relationship with teachers, and the environment is safe, stimulating, and emotionally proactive. Teachers are nurturing, caring, and model appropriate relationships. Engagement in DAP classrooms provides a foundation for early learning that can help the young child form the protective factors of self-regulation, self-expression, and self-assertion, key to building a child's resilience (Mortensen & Barnett, 2016; Pizzolongo & Hunter).

In classrooms where DAP is embraced, children are taught self-regulation skills (Copple & Bredekamp, 2009). Early childhood educators help children learn how to recognize their feelings, express them appropriately, and regulate them in healthy and appropriate ways (Colker, 2018; Pizzolongo & Hunter).

Teachers practicing DAP are sensitive to the child's emotional needs and support the child with the self-expression of emotions, providing a safe emotional space for all feelings the child may be feeling. We understand that different children express emotions differently, and we know our students. Early childhood educators are honest about emotions and provide safe ways for children to express themselves. We provide predictable schedules so that children feel safe in their environment, leading to better self-regulation skills (Pizzolongo & Hunter). DAP classrooms are safe spaces where appropriate ways to self-soothe are modeled, and the child's emotions are taken seriously (Colker; Pizzolongo & Hunter). All of these strategies ultimately help the developing child grow in self-regulation skills and fortify their resilience (Pizzolongo & Hunter; Sciaraffa et al., 2018.).

Colker states that caring and nurturing teachers in DAP classrooms help children express their feelings in acceptable ways and exhibit self-control even in the face of strong emotions. Classrooms are safe spaces for children to talk about how they feel with trusted adults, and teachers in DAP classrooms offer children myriad ways to express emotions and support them with sharing their feelings. According to Colker, nurturing teachers help students find the words they are looking for when they are upset, and they offer children tools to help find their feelings such as puppets, charts of feelings, safe places to calm down, warmth, and security. Teachers serve as role models to facilitate the child's socio-emotional development. When children can safely express their emotions and name their feelings, they build up their protective factors (Colker, 2018; Pizzolongo & Hunter; Sciaraffa et al., 2018).

Normal, healthy development includes a child standing up for their thoughts, beliefs, and ideas. Teachers who embrace developmentally appropriate practices are patient when the young child asserts themselves (Copple & Bredekamp, 2009). The developing child needs a range of safe choices, a sense of agency in learning, and to know their opinions matter (Colker; Pizzolongo & Hunter). A DAP learning environment helps the child learn to be self-assertive, whereby materials, books, and toys are presented at their level. The child can build independence in material selection and at clean-up time. By helping our young learners assert themselves in developmentally appropriate ways, early childhood educators can help young children strengthen their ability to bounce back from adversity.

## Secure Attachments and Nurturing Caregivers

Research on resilience in children overwhelmingly supports the idea that a secure connection with one primary caregiver helps a child rebound from tragedy. Bronfenbrenner (2005) posited that a child's resilience depends on at least one caring, supportive adult. Competent, caring caregivers are instrumental in the child's physical and mental safety and emotional well-being (Colker; Pizzolongo & Hunter). A young child's secure emotional attachments can significantly diminish the impacts of parental stress (Tharner et al., 2012), extreme deprivation (McGoron et al., 2012), and the adverse effects of living through traumatic situations (Belsky &

Fearon, 2002). Teachers who embrace DAP understand that we teach the whole child within the construct of their family.

## Sense of Belonging in a Safe Community

Teacher connection to the young child is vital, implying that teachers and caregivers should make themselves available to students to establish and maintain a connection. This connection is especially crucial during quarantines when the child may feel most disconnected from their school and classroom community. Teachers who foster resilience in their young students are accessible, available, and approachable. They listen to their students, engage them in conversations and learning, advocate for their students, show empathy in the face of crisis, and provide psychosocial support to their students in both peaceful times and when they are facing traumatic experiences (Theron et al., 2014; Ungar et al., 2013).

## Threats to the Child's Social Ecology During Quarantine

During distance learning, many students struggled while others adapted more easily. Four-year-old preschoolers figured out new technologies; five-year-old children checked email for lessons; six-year-old students met their classes on Zoom and Google Meet. They showed up eating breakfast. They showed up with uncombed hair. They showed up in warm and cozy pajamas. But they showed up. They showed up ready to learn.

How can young children show such strength and determination in the face of crisis? What makes a child resilient? For years it was held that resilience is an inherent trait: you have it or you don't (Masten, 2013). In contrast, research suggests that a child does not develop and grow within a vacuum. Instead, it develops within a series of interconnected systems – much like Russian nested dolls – featuring interconnected groups and communities and the child's family relationships, to form the child's social ecology (Bronfenbrenner, 1979). These systems, beginning with the child and moving outward, are the micro-, exo-, meso-, and macrosystem as outlined by Bronfenbrenner.

Masten and Barnes (2018) outlined vital supports that help a young child survive crises and bounce back from disaster. Deemed necessary to the child's healthy development and ability to cope with stress during a tragedy, these include caring, nurturing, and skilled caregivers; a sense of belonging; close familial relationships; family routines and rituals; personal agency and motivation to adapt; problem-solving and executive functioning skills; self-regulation; self-efficacy; positive self-identity; and hope and faith (Masten & Barnes, 2018; Sciafarra et al., 2012). Each of these supports takes place within the child's social ecology. During the COVID-19 crisis and subsequent school closures, we have seen threats to every area of the child's ecological system. Using Bronfenbrenner's Ecology Theory (1979), we can look at the many influences that support or inhibit a child's ability to build resilience and spring back from traumatic experiences (Masten, 2013; Noffsinger et al., 2012). A crisis like the COVID-19 pandemic threatens the child's ecological system.

At the Microsystem level, the family plays the most influential role in a child's ability to recover from disaster (Masten; Noffsinger et al.). The child's home setting, along with the people and groups with whom the child directly interacts – parents, friends, teachers, and role models – are critical for meeting the child's basic needs and preparing children to adapt to disaster (Noffsinger et al.). During the COVID-19 quarantine, parents faced a multitude of physical and mental health concerns, job security, loss of connections to family members, isolation, stress, and potential for an increase in substance abuse, domestic violence, and child abuse (APA, 2020; Golberstein et al.; Prime et al., 2020). Such crises put parental mental health at risk, often leading to irritability, marital stress, depression, financial strain, and decreased parenting efficacy (Prime et al.; Noffsinger et al.). Children of all ages suffered losses during quarantine: they lost their human connections in their familiar classroom environments – with classmates, friends, and teachers. Children lost mental and physical health care. Further compounding the young child's loss during quarantine, many families lacked the necessary supports for online learning including high speed internet, broadband or Wi-Fi connections, and adequate access to devices for connecting to online learning. They lost connections to their school community during the quarantine.

Quarantine can sever families from the supports they need, which schools and communities provide (Pfefferbaum et al., 2012). At the Mesosystem level, children and families lost the ability to visit grandparents and extended family. They lost social support groups, social engagement, and access to resources and materials. Loss of peer groups and direct interaction between children and families with teachers, other families, and school personnel was also experienced. Children lost sports, lessons, playgroups, outings, and recreational activities. Meanwhile, families lost transportation systems, communication channels, integration within the neighborhood and community, ties with other families, employment, access to healthcare, and loss of income. They faced unemployment, housing disruption, the collapse of economic markets, exposure to negative media coverage. Negative impacts on the adults in the child's life cause severe disruptions to the child's social ecology.

At the Exosystem level, families experienced disruptions or the loss of transportation systems, communication channels, integration within the neighborhood and community, ties with other families, employment, and income. They faced and continue to face unemployment, housing disruption, the collapse of economic markets, exposure to negative media coverage. Indirect negative impacts on the adults in the child's life cause severe disruptions to the child's social ecology.

At the Macrosystem level, disaster responses and recovery efforts can, directly and indirectly, impact the child and the family through social, economic, cultural, and political structures and processes (Prime et al. 2020; Noffsinger et al. 2012). Schools can connect families with national-level socio-political, cultural, and environmental systems and programs that support disaster relief (Pfefferbaum et al., 2012).

## Threats and Supports for Children

In order to adapt Bronfenbrenner's (2005) social ecology systems theory to the COVID-19 context, this author synthesized the threats and supports detailed above into a matrix. The child's social ecology systems, threats at each level, and supports needed for the child and family are detailed in *Table 1*.

## Supporting Families with a System of Care

As early childhood educators, we have the potential and duty to mitigate many of the issues that arise from ACEs for our young learners. Early childhood teachers, schools, and childcare facilities can fortify the child's social ecology at every level, as shown in the supports listed in *Table 1*. Schools and childcare centers are encouraged to develop a comprehensive system of care (SoC) (Pfefferbaum et al. 2012; Stroul et al., 2010): a holistic network of programs that serve children and families. This SoC avails services, including physical and mental health, support, welfare, justice, education, community support, and access to spiritual resources (Stroul et al.). Specifically, a SoC is an organized, coordinated network that builds partnerships with families and children and addresses their needs to help families function better at home, in school, in the community, and throughout life. SoCs are child-guided, family-driven, community-based, and culturally appropriate (Stroul et al.).

Research has shown that schools play an integral role in building a child's resilience (Anderson et al., 2004), serving as the hub for a child's access to a wide range of resources. Thus, schools have the unique potential to help a child build resilience in the face of ACEs (Anderson et al.; Liebenberg et al., 2016). Schools can potentially facilitate a child's resilience in the face of risks, with virtual school sites serving to counteract the loss of resilience resources that are missing for the child (Liebenberg et al., 2016; Theron et al.; Ungar et al., 2013). During crises, and especially during quarantines when face-to-face services are unavailable, this system of care can be delivered through a centralized, on-line service and support delivery portal, such as a webpage with links, information, and access to services. This article concludes by proposing supports that such a SoC could offer through an integrated portal format.

At the Microsystem level, schools can support young learners during a quarantine by providing online access to teachers, counselors, and peers. We can encourage online playdates and help parents navigate the technology to help children meet with friends. Teachers can plan lessons with built-in choice and voice for our students and ask for (and use) their feedback about on-line lessons. Early childhood teachers can help young learners create spaces for learning at home and establish new routines. We can help students express emotions by having daily emotional check-ins built into our learning, giving them developmentally appropriate ways to express joy, fears, concerns, loneliness, and other feelings. Schools can provide licensed school counselors with access to help students and families navigate the unfamiliar territory of home learning. Early childhood teachers can find older peer mentors for students and build connections across grade

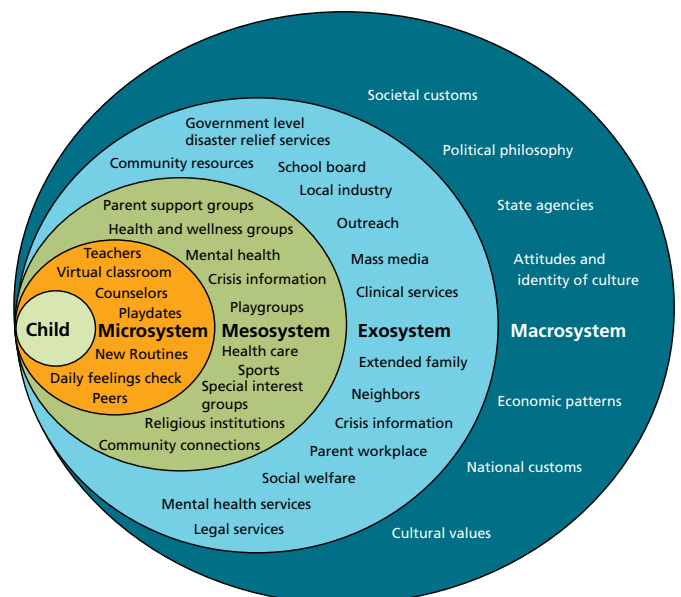
levels. We can teach our students to use therapeutic activities to help rebuild during a crisis.

At the Mesosystem level, we can help mitigate the challenges families face during pandemics by helping children and families connect with other families. We can help parents by distributing information about the crisis and connecting families to service providers they need outside of the school setting. Schools can offer and arrange parent support groups, help families connect through parent coffee hour or other virtual get-togethers. Schools can connect families to support systems outside of the school and help families make connections within the broader community. We can connect families to a myriad of resources, including mental health services, crisis information, healthcare, and special interest groups like health and wellness and sports forums. During quarantines, schools can help arrange parent play dates and help parents find or create exercise and wellness groups. By helping the child cope with a crisis, we help to fortify the family and teach our children (and parents) to be resilient.

At the Exosystem level, schools can offer parent support and health and wellness groups. We can give parents resources for health care and mental health services outside of school. Schools can offer resources for crisis information. Teachers can connect parents to special interest groups such as online sports activities, virtual fitness classes, learning online opportunities, based on the interests, cultures, and needs of families. Educators can help parents connect to community and religious institutions, like places of worship or cultural centers. Schools can mediate many of the issues facing families during a global pandemic by offering access to available supports. These are especially crucial during quarantine and the multitude of issues a family faces during isolation.

Framing Pfefferbaum's (2012) emergency System of Care network model within Bronfenbrenner's (2005) social ecology system's theory, this author proposes a comprehensive system of care during a crisis detailed in *Figure 1*.

**Figure 1 System of Care During a Crisis**



**Table 1. Matrix of Threats and Supports to the Child’s Social Ecology During Quarantine**

Child’s Ecological System	Threats	Supports
<p><i>Microsystem:</i> encompasses the child and the child’s home setting, along with the people and groups with whom the child directly interacts; parents, friends, teachers, role models</p>	<ul style="list-style-type: none"> <li>• Human connection</li> <li>• Isolation</li> <li>• Parent anxiety</li> <li>• Job loss</li> <li>• Substance abuse</li> <li>• Domestic violence</li> <li>• Child abuse</li> <li>• Parental mental health</li> <li>• Loss of routines</li> <li>• Marital stress</li> <li>• Irritability and depression</li> <li>• Financial strain</li> <li>• Decreased parenting efficacy</li> <li>• Child behavior problems</li> <li>• Loss of peer interactions</li> <li>• Displaced parents</li> <li>• Fear</li> <li>• Loss of loved ones</li> <li>• Home confinement</li> <li>• Sibling issues</li> <li>• Lack of access to technology and limited or lacking devices; Weak or no internet connection</li> </ul>	<ul style="list-style-type: none"> <li>• Access to teachers</li> <li>• Access to peers</li> <li>• Online play dates</li> <li>• Maintain the child’s sense of agency in learning experiences</li> <li>• Choice in online learning</li> <li>• Teacher office hours</li> <li>• Teacher talk time</li> <li>• New routines</li> <li>• Daily emotional check-ins</li> <li>• Developmentally appropriate expressions of worries, fears, and concerns</li> <li>• Access to licensed school counselors</li> <li>• Peer mentors</li> <li>• Restorative activities</li> <li>• Internet access</li> <li>• Access to technology</li> </ul>
<p><i>Mesosystem:</i> children, parents, teachers, other adults, members of faith-based organizations, school, and faith-based activities</p>	<ul style="list-style-type: none"> <li>• No extended family visits</li> <li>• Loss of sports and lessons</li> <li>• Loss of social support groups</li> <li>• Loss of social engagement</li> <li>• Loss of access to resources and materials</li> <li>• Loss of peer groups</li> <li>• No direct interaction between child and family with teachers, other families, and school personnel</li> <li>• Loss of access to mental health care; physical health care</li> <li>• Loss of spiritual activities</li> </ul>	<ul style="list-style-type: none"> <li>• Parent play times</li> <li>• Access to licensed school counselors</li> <li>• Parent coffee hour</li> <li>• Parent support groups</li> <li>• Exercise and wellness groups</li> <li>• Connecting to support systems outside of the school</li> <li>• Well-functioning school</li> <li>• Community connections</li> <li>• Mobile mental health and wellness units</li> <li>• Mobile access to healthcare</li> </ul>
<p><i>Exosystem:</i> the child’s neighborhood, mass media, places of work, special agencies, and things that impact adults in the child’s life</p>	<ul style="list-style-type: none"> <li>• Institutions, structures networks state and federal agencies</li> <li>• Transportation systems</li> <li>• Communication channels</li> <li>• Families social integration within the neighborhood and community</li> <li>• Ties with other families</li> <li>• Social networks</li> <li>• Loss of employment</li> <li>• Exposure to negative media coverage</li> <li>• Social network disruption</li> <li>• Unemployment</li> <li>• Loss of income</li> <li>• Housing disruption</li> <li>• Collapse of economic markets</li> </ul>	<ul style="list-style-type: none"> <li>• Government-level-disaster relief and mental health services</li> <li>• Distribute information to parents</li> <li>• Outreach</li> <li>• Clinical services</li> <li>• Connections to resources</li> </ul>
<p><i>Macrosystem:</i> disaster responses and recovery efforts which impact the child and the family directly and indirectly through social, economic, cultural, and political structures and processes</p>	<ul style="list-style-type: none"> <li>• Social, economic, and political structures</li> <li>• Prejudice</li> <li>• Discrimination</li> <li>• Lack of social support</li> <li>• Cultural values</li> </ul>	<ul style="list-style-type: none"> <li>• Connect families with national sociopolitical, cultural, and environmental programs</li> </ul>

## Living with a Pandemic

We know very little about the long-term impacts of the COVID-19 pandemic and potential future quarantines. However, we do know that adverse childhood experiences threaten the developing child and the concentric social systems in which they live (Noffsinger et al., 2012). Uncertainty surrounds the pandemic: how long it will last, when it will end, when family life will return to normal, whether parents laid off due to the pandemic will return to the workforce, when relatives separated by travel bans will be united, and the long-term mental and physical health impacts on society. We do know that COVID-19, and its effects on children and families, will be here for a while.

At the time of writing, several COVID-19 vaccine candidates received approval and distribution began in many places. However, it remains unclear when a vaccine will be openly available to the general population, implying that there is yet no definitive end in sight for the disease to stop spreading. As we adjust to the new normal, schools, teachers, families, and healthcare providers play crucial roles in supporting the systems necessary for young children to build resilience in adverse life experiences (Masten & Barnes, 2018). Researchers need to continue to study the impacts of this worldwide dilemma on the young and developing child, including longitudinal studies on the effects of quarantine and home learning. Further research on virtual supports for families enduring crises would prove beneficial. It is our charge and our duty as early childhood educators to protect our children from the physical dangers of disasters and to bolster them emotionally to help them build resilience to survive this pandemic, thrive in this new world, and develop tools to use in future adverse life experiences.

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## References

- American Academy of Pediatrics. (2020). *COVID-19 planning considerations: Guidance for school re-entry*. <https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/>
- American Psychological Association. (2020). *APA COVID-19 information and resources*. <https://www.apa.org/topics/covid-19/index#education>
- Anderson, A., Christenson, S., Sinclair, M., & Lehr, C. (2004). Check & connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology, 42*, 95–113.
- Belsky, J., & Fearon, R. (2002). Infant-mother attachment security, contextual risk and early development: A moderational analysis. *Development and Psychopathology, 14*(2), 293–310.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Bronfenbrenner, U. (2005). *The ecology of human development*. Cambridge, MA: Perseus.
- Bronfenbrenner, U., & Morris, P. A. (2006). *The Bioecological Model of Human Development*. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (p. 793–828). John Wiley & Sons Inc.
- Colker, L. (2018, February/ March). Being a helper: Supporting children to feel safe and secure after disasters. *Teaching Young Children, 11*(3). <https://www.naeyc.org/resources/pubs/tyc/feb2018/being-helper-supporting-children-feel-safe-and-secure-after-disasters>
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth to age eight*. Washington, DC: NAEYC.
- Decker, S., Peele, H., & Riser-Kositsky, M. (2020, July 1.) The coronavirus spring: The historic closing of U.S. Schools. *Education Week*. <https://www.edweek.org/ew/section/multimedia/the-coronavirus-spring-the-historic-closing-of.html>
- Felitti, V., Anda, R., Nordenberg, D., Edwards, V., Kross, M., & Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine, 14*(4), 245–258.
- Freud, A., & Burlingham, D. T. (1943). *War and children*. Medical War Books.
- Golberstein, E., Wen, H., & Miller, B. (2020). *Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents*. American Medical Association.
- Gunderson, L. H., Allen, C. R., & Holling, C. S. (Eds.). (2010). *Foundations of ecological resilience*. Island Press.
- Harper, D. (2020). *Online Etymology Dictionary*. <https://www.etymonline.com/word/resilience>
- Li, R., Pei, S., Chen, B., Song, Y., Zhang, T., Yang, W., & Shaman, J. (2020). Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV-2). *Science, 368*(6490), 489–493.
- Liebenberg, L., Theron, L., Sanders, J., Munford, R., van Rensburg, A., Rothmann, S., & Ungar, M. (2016). Bolstering resilience through teacher-student interaction: Lessons for school psychologists. *School Psychology International, 37*(2), 140–154.
- Masten, A. S. (2013). Global perspectives on resilience in children and youth. *Child Development, 85*(1), 6–20.
- Masten, A., & Barnes, A. (2018). Resilience in children: Developmental perspectives. *Children, 5*(7), 98.
- McGoron, L., Gleason, M. M., Smyke, A. T., Drury, S., Nelson, C. A., Gregas, M. C. et al. (2012). Recovering from early deprivation: Attachment mediates effects of caregiving on psychopathology. *Journal of the American Academy of Child Psychiatry, 51*, 683–693.
- McKenzie, E. (2013). National Board certification and developmentally appropriate practices: Perceptions of impact. *Journal of Research in Childhood Education, 27*(2), 153–165. <https://doi.org/10.1080/02568543>

2013.766661

- Mortensen, J. A., & Barnett, M. A. (2016). The role of child care in supporting the emotion regulatory needs of maltreated infants and toddlers. *Child and Youth Services Review, 64*, 73–81.
- Noffsinger, M., Pfefferbaum, B., Pfefferbaum, R., Sherrieb, K., & Norris, F. (2012). The burden of disaster: Part 1. Challenges and opportunities within a child's social ecology. *International Journal of Emergency Mental Health and Human Resilience, 14*(1), 3–13.
- Pfefferbaum, R., Jacobs, A., Noffsinger, M., Pfefferbaum, B., Sherrieb, K., & Norris, F. (2012). The burden of disaster: Part II. Applying interventions across the child's social ecology. *International Journal of Emergency Mental Health and Human Resilience, 14*(3), 175–187.
- Pizzolongo, P. & Hunter, A. (2011, March). I am safe and secure: Promoting resilience in young children. *Young Children, 67*–69.
- Prime, H., Wade, M., & Browne, D. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist, 75*(5), 631–643.
- Sciaraffa, M. A., Zeanah, P. D., Zeanah, C. H. (2018). Understanding and promoting resilience in the context of adverse childhood experiences. *Early Childhood Education Journal, 46*(3), 343–353.
- Spenrath, M. A., Clarke, M. E., & Kutcher, S. (2011). The science of brain and biological development: Implications for mental health research, practice and policy. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 25*(2), 130–131.
- Stroul, B., Blau, G., & Friedman, R. (2010). *Updating the system of care concept and philosophy*. Georgetown University Center for Child and Human Development, National Technical Assistance Center for Children's Mental Health.
- Tharner, A., Luijk, M. P. C. M., van IJendoorn, M. H., Bakermans- Kranenburg, M. J., Jaddoe, V. W. V., Hofman, A., & Tiemeier, H. (2012). Maternal lifetime history of depression and depressive symptoms in the prenatal and early postnatal period do not predict infant–mother attachment quality in a large, population-based Dutch cohort study. *Attachment & Human Development, 14*(1), 63–81.
- Theron, L., Liebenberg, L., & Malindi, M. (2014). When schooling experiences are respectful of children's rights: A pathway to resilience. *School Psychology International, 35*(3), 253–265.
- Ungar, M., Ghazinoor, M., & Richter, J. (2013). Annual research review: What is resilience within the social ecology of human development? *Journal of Child Psychology and Psychiatry, 54*(4), 348–366.
- University of Oxford. (n.d.) Resilience. In Oxford Learner's Dictionary. <https://www.oxfordlearnersdictionaries.com/definition/english/resilience>
- World Health Organization. (2020). Timeline: WHO's COVID-19 Response. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline>
- Xie, X., Xue, Q., Zhou, Y., Zhu, K., Liu, Q., Zhang, J., & Song, R. (2020, April 24). *Mental health status among children in home confinement during the Coronavirus Disease 2019 Outbreak in Hubei Province, China*. American Medical Association. <https://jamanetwork.com/journals/jama-pediatrics/fullarticle/2765196>



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