



## **Children, Schooling, and COVID-19: What Education Can Learn From Existing Research**

Chloë Brushwood Rose  
*York University*

Morgan Bimm  
*York University*

### **Abstract**

This paper offers a review of the research on children, schooling, and disasters in order to identify critical information for the field of education and the practice of educational research in response to the COVID-19 pandemic. What do we know about the experiences of children and their interactions with schools during and following a natural disaster like COVID-19? The review answers this question and both identifies areas of study that need further attention and explores critical methodological approaches for further educational research. Areas of the research reviewed include children's experiences of disaster, the educational impacts of disaster, the role of schools and teachers in responding to disaster, and methodological considerations for further research. The authors conclude that educational research can play a critical role in recovery efforts for children, teachers, and schools.

### **Introduction**

In January 2020, the World Health Organization (WHO) declared the outbreak of a new coronavirus disease, COVID-19, to be a Public Health Emergency of International Concern. In March 2020, WHO made the assessment that COVID-19 can be characterized as a pandemic, which poses unique mental health and psychosocial considerations (World Health Organization, 2020). Epidemics or pandemics, like COVID-19, are classified as biological natural disasters (Centre for Research on the Epidemiology of Disasters, 2009) and may have similar economic, social, and political impacts to other kinds of natural disasters, but they also have unique characteristics that shape the social and psychological experiences of those who live through them. Several recent studies point to the unique impacts of COVID-19 due to social distancing and



quarantine, including negative psychological effects such as post-traumatic stress symptoms, confusion, and anger, and social effects such as increased reports of domestic violence, child abuse, and neglect (Brooks et al., 2020; Lee, 2020). However, as these researchers point out, not much is known about the long-term mental health effects of large-scale disease outbreaks on children and adolescents nor about how prolonged school closures, strict social distancing measures, and the pandemic itself affect the wellbeing of children and adolescents (Lee, 2020).

It is important to note that, while children and youth are often the hardest hit by collective experiences of disruption and disaster, overall, there is relatively limited research on the effects of pandemics and other natural disasters for children (Anderson, 2005; Fothergill & Peek, 2015) and even less research on how teachers and schools, who are among their primary sources of support, can respond to children's "educational vulnerability" following disaster (Peek, 2008). In Canada, public discourses about the pandemic and its effects for children have focused mainly on the immediate effects of interruptions to schooling for families and debates about when face-to-face schooling should resume and how (McGillivray, 2021; Vogel & Couzin-Frankel, 2020). There has been little discussion in the mainstream media of the potential long-term effects of these educational interruptions for children or about the important role schools and teachers can play for children and families in disaster recovery. The limited research that does exist in disaster studies on these questions suggests that sustained interruptions to schooling have long term consequences for children's educational trajectories and that these consequences map onto pre-existing socio-economic inequalities, amplifying experiences of systemic marginalization (e.g., Casserly, 2006; Fothergill & Peek, 2015). There is very little research on children's educational experiences during and following disaster and the school's role in recovery post-disaster (Mutch, 2014). Much of the research focuses on the role of schools in disaster preparedness and response but not long-term recovery. This gap is heightened by the fact that most research focuses on sudden-onset events, such as earthquakes, rather than slow onset disasters, such as pandemics (Peek, 2008).

As a category, natural disasters include hazardous events with geological, meteorological, climatological, and biological causes. Pandemics and epidemics are considered biological natural disasters or hazards "caused by the exposure to living organisms and their toxic substances or vector-borne diseases that they may carry" (Centre for Research on the Epidemiology of Disasters, 2009). Throughout the research, there are many definitions of natural disaster; however, a common theme is that these hazards "overwhelm local response capacity and seriously affect the social and economic development of a region" (Ferris & Petz, 2012, as cited in Mutch, 2014, p. 6). Disasters are characterized by "suddenness, unexpectedness, lack of preparedness," the "inability of existing systems to cope," and "large-scale death or dislocation," but also of importance is "the sense that a group of people make of the event – a shared identity that they have, together, been affected by a major catastrophe" (Winkworth, 2007, p.17, as cited in Mutch, 2014, p. 6). In addition to these qualities shared among natural disasters, pandemics are characterized by unique qualities: their mobility and spread (Ali & Keil, 2006) and their long-term biosocial effects (Barrett & Brown, 2008; Richardson et al., 2017).

Biosocial effects, such as social stigma, are unique to epidemics and pandemics. In a way that resonates with the early discourses surrounding COVID-19, Barrett and Brown (2008) describe how the 1918 influenza pandemic, because it readily spread across many different demographic categories and populations around the world, was initially described as more "democratic" than other infections. And yet, as with COVID-19, there were many examples "of public panic, discriminatory statutes, and avoidable mortality among systematically abandoned sick individuals" (Barrett & Brown, 2008, p. S35). In North America, "COVID-19 has further exposed the strong association between race, ethnicity, culture, socioeconomic status and health

outcomes and illuminated monumental ethnoracialized differences reflecting the ‘colour of disease’” (Yaya et al., 2020, p. 1). These differential outcomes are directly related to the ways in which racism, segregation, and inequality are embedded in our social institutions and produce differential access to health care based on race, body size, gender, and social class (Alliance for Healthier Communities, 2020; VAW Learning Network, 2020; Wallis, 2020). Words like ‘epidemic’ and ‘pandemic’ can give us a false sense that these diseases are purely biological and can obscure the social, historical, and global forces that shape their spread and uneven effects (Richardson et al., 2017).

Considering the social-political dimensions of a pandemic like COVID-19 is critical for understanding the experiences of children and schooling during such a disaster and their vulnerabilities and opportunities during recovery. Indeed, the boundaries of the pandemic exceed its biological determinants; the disaster does not end when the transmission of a pathogen ceases (Richardson et al., 2017). The research suggests that a pandemic like COVID-19 will continue to affect the educational experiences of children and schools for years after transmission of the virus is contained, even among children who are of pre-school age during the biological event (Smilde-van den Doel et al., 2006). For these reasons, our conceptions of recovery must also be more holistic and address the multiple spheres in a child’s life. Fothergill and Peek (2015) write that they “conceptualize children’s recovery as when a child has a semblance of stability, routine, well-being, and predictability in all spheres of life” (p. 32). And yet, they acknowledge that the social dimensions of disaster interact with existing social inequalities in such a way that recovery would also mean addressing systemic issues that existed prior to the disaster itself, as “there are many children living at the margins of society before disaster strikes, who live a daily existence lacking any stability, sense of routine, or predictability” (Fothergill & Peek, 2015, p. 32).

In this literature review, we try to attend to the many dimensions of experience impacted by disasters like COVID, paying particular attention to research on their social and educational effects. We offer a review of the social science research on children, schooling, and disasters in order to identify critical information for the field of education and the practice of educational research in response to the COVID-19 pandemic. This review does not include the significant amount of research on the psychological effects of disaster for children that has been published in the fields of experimental and clinical psychology, although work addressing psychological effects published in the social sciences was considered (for example, Navarro et al., 2016; Weissbecker et al., 2008). Our theoretical framework reflects a social-ecological approach for thinking about children’s experiences, vulnerabilities, and relationships with schools, during and following disaster (Osofsky & Osofsky, 2018). This approach is critical of the focus on individual resilience and instead prioritizes an attention to the experiences of children and communities in relation to social, cultural, political, and ecological systems and contexts. In this way, we understand children’s vulnerabilities and strengths as shaped and constrained by systemic forces.

In order to provide context for emerging research in education and other fields in which we are called to explore the meaning and effects of the COVID-19 pandemic, we set out to answer the question: what do we already know about the experiences of children and their interactions with schools during and following a natural disaster like COVID-19? The review answers this question and both identifies areas of study that need further attention and explores critical methodological approaches for further educational research. Thematic areas of the literature explored below include children’s experiences of disaster, the educational impacts of disaster, the role of schools and teachers in responding to disaster, and methodological considerations for further research.

## **Children and Disasters**

Disasters, and specifically large-scale disease outbreaks like COVID-19, are felt by children in many different ways: through direct infection and the infection of parents or other family members; through the daily influence and presence of contagion, illness, and death; and through severe disruption of their social environments, resulting in social isolation, missed school and social opportunities, and interrupted or delayed academic progress (Krüger et al., 2008; La Greca, 2006; Peek, 2008). And yet, children's experiences of disaster remain understudied, particularly their experiences of biological disasters such as pandemics. Much of the existing research on children and disasters takes an overly adult-centric perspective and treats children either as largely unaffected by disaster or as passive victims (Gibbs et al., 2013; Mutch, 2013). Children are still considered primarily as extensions of their mothers, despite the fact that children's needs are distinct from their parents, and they require different forms of physical, social, mental, and emotional support than the adults in their lives (Cutter, 2017; Peek, 2008). A child's age poses its own unique vulnerabilities to disaster: for example, because children are still enrolled in school, experiences of disaster are more likely to have long-term educational impacts for children (Peek, 2008), and age-related vulnerabilities can make children's negative mental health outcomes much more severe than those of adults (Norris et al., 2002).

While children remain understudied, there have been some notable challenges to the field of disaster studies in this area. In his influential paper on "bringing children into focus," Anderson (2005) argues that children have most often been invisible and undocumented or framed as "vulnerable victims" in disaster research, and he challenges researchers to more carefully consider the complex nature of young people's experiences. Anderson argues that children remain understudied because they "do not set the research agenda; do not carry out research; and are not in policy making or relevant professional positions" (p. 161). Children need adult researchers to facilitate the documentation of their experiences, and Anderson suggests the need for research in at least three areas: "what disasters do to children and youths, what is done on behalf of children to make them less vulnerable, and what children do for themselves and others to reduce disaster impacts" (p. 162). In his framing of these areas, Anderson intentionally positions children as agents who can act in the protection of themselves and others. This stands in contrast to much of the research on children and disasters, which frames them primarily as passive or unaffected.

For example, in their study of children's experiences during and following Hurricane Katrina, a Category 5 Atlantic hurricane which hit the southern United States in 2005, Fothergill and Peek (2015) describe several commonly held and somewhat contradictory misconceptions about children: first, that they are somehow naturally resilient to disaster; second, that they are especially vulnerable and powerless; and, third, that they are a homogenous group equally affected by disaster. In contrast, their research with children during and following Katrina suggests that children are both profoundly affected by disaster as well as being active agents in their own lives. Their research also contests the notion that children are a homogenous group; children's experiences, they suggest, are marked by social difference, their unique contexts, and by existing inequalities. While there is existing research on how those marginalized due to race and ethnicity, social class, and gender are disproportionately affected by the negative consequences of disasters (Fothergill et al., 1999; Reid, 2013; Thomas et al., 2013), there is much less research that looks at the intersectionality of these social differences with the unique vulnerabilities posed for children by their age (Anderson, 2005; Fothergill, 2017; Peek, 2008).

Fothergill and Peek's (2015) study illustrates the ways in which a child's age interacts with other factors in a child's life, creating a cumulative vulnerability. The occurrence of disaster is an

additional stressor on top of the social vulnerability and structural disadvantage a child and their family may already be confronting. For instance, following Hurricane Katrina, children who fit what Fothergill and Peek describe as a “declining trajectory” up to seven years after the initial disaster were “more likely to live in families with fewer financial resources ... [and] less social and cultural capital” (Fothergill & Peek, 2015, p. 197). These families tended to be single-parent, female-headed households that relied on networks of kin who were similarly under-resourced. In another example, a study of children with disabilities living in shelters following Katrina found that they were “especially prone to exclusion from information and services made available to other children in shelters such as recreation, crisis intervention, or different forms of therapy” and that questions of accessibility were frequently the last to be addressed as schools reopened and adjusted to disaster circumstances (Peek & Stough, 2010, p. 1265–66). These examples of the intersectionality of age with other experiences of social difference challenge misconceptions about the homogeneity of children as a group. There is a need for more research on the experiences of children, who have unique needs and experiences due to age, but this research must also explore the ways that, like adults, children grapple with the consequences of complex social identities, including age, race, social class, and gender (Fothergill & Peek, 2015; Osofsky & Osofsky, 2018).

Researchers suggest that this attention to social difference among children must understand it as structural and systemic in nature, especially in the context of disaster. Proponents of what is called the “social vulnerability” approach argue that disasters are in fact a complex mix of natural hazards, events, and, importantly, *human action*, and their impacts are thus disproportionate based on existing inequalities (Peek & Stough, 2010). Studies show that actions taken by government and service organizations to respond to families’ needs during disaster recovery are often characterized by disparities that both reflect and exacerbate the inequality and systemic barriers that pre-exist disaster (Kilmer & Gil-Rivas, 2010). For example, most recently we have seen that children in care are at a heightened risk of harm not only from the current COVID-19 pandemic but also in many cases from government policies being implemented to contain the epidemic (Birken et al., 2020). In order to understand how existing inequalities intersect with the effects of disaster, researchers suggest a shift away from a focus on individual resilience to a social-ecological framework that views individuals in social context and takes up the reciprocal relationships between human, social, and environmental systems (Edwards, 1998; Osofsky & Osofsky, 2018). This structural approach must consider educational systems as a critical part of children’s social-ecological contexts.

### **The Educational Impacts of Disaster**

Schools and teachers are a critical part of the social ecology of every child. Children spend a majority of their time interacting with others in schools, and schools provide much of the structure and routine in a child’s life. The educational vulnerability of children following disaster has received little attention, but it is clear that disasters can “disrupt children’s educational process and diminish their long-term educational outcomes” (Fothergill & Peek, 2015, p. 22). Children lose valuable instruction time—schools are closed or children may miss school or may be unable to concentrate once they are there—and teachers may also be overwhelmed and unable to provide the care and support that children need. Researchers note “educational vulnerability” as a key area of children’s vulnerability to disaster (Peek, 2008) and argue that discontinuities in the education of children need to be considered when the social and economic costs of disasters are assessed by researchers (Anderson, 2005, p. 164).

Educational impacts can be subject specific following a disaster event, with the most negative influence on schoolwork reported for subjects demanding high levels of concentration (such as math, physics, and grammar) (Gibbs et al., 2019), and can also be long-term, even for children who are not yet enrolled in school when disaster strikes. For example, research has shown that even children who start school several years after a disaster can also experience disaster-related traumas and problems (Smilde-van den Doel et al., 2006). Like other impacts, educational impacts are complicated by existing structural inequalities. For example, generalizations about impact on academic performance are complicated by the fact that the schools most impacted by disasters are also those with less resources and lower socioeconomic status (Gibbs et al., 2019), and there are reports that students from lower socioeconomic families and those with parents with lower education levels are more likely to be kept home even when schools are open (Alphonso, 2020). More globally, girls in particular are at special risk for having their educational trajectories disrupted “because of cultural expectations and their heavier workloads” (Peek, 2008, p. 9) with respect to domestic and care-giving responsibilities.

According to the Children’s Ebola Recovery Assessment (Risso-Gill & Finnegan, 2015), conducted following the 2014 Ebola epidemic in Sierra Leone, children themselves are very concerned about these educational impacts. As almost half the population of Sierra Leone was under 18 years of age at the time of the Ebola outbreak, researchers set out to create a formal process through which children could identify their own priorities for recovery. The children who participated in the study overwhelmingly identified the closure of schools as an issue of primary concern for them, citing worries about the long-term negative impact on their learning, social interaction and protection, and future opportunities (Risso-Gill & Finnegan, 2015). Not unlike our experiences in Canada with COVID-19, schools in Sierra Leone were shut for more than nine months, while remote learning continued via radio and television broadcasts. Through focus group discussions, children shared worries about becoming “backward,” forgetting what they had learned, losing their abilities to concentrate on studying, and missing seeing and playing with friends (Risso-Gill & Finnegan, 2015, p. 9). School closures also resulted in an increased workload at home for children and decreased social and physical safety. However, children were most concerned with the impact of educational interruptions on their future opportunities to successfully return to and complete school programs and pursue career goals.

Fothergill and Peek’s (2015) study of children’s experiences of Hurricane Katrina suggests that children’s worries about their educational trajectories following significant interruptions to schooling are warranted. While their longitudinal study of children and youth beginning during the immediate aftermath of the hurricane identified three kinds of trajectories experienced by children following disaster—declining, finding equilibrium, and fluctuating—they note that all children experienced long-term educational impacts because of the way in which the “school sphere” in children’s lives has specific time parameters: “when the window for schooling is gone, children cannot get it back” (Fothergill & Peek, 2015, p. 271). Children who are the most structurally marginalized and socially vulnerable, especially if they are older, may never go back to school following an interruption. However, even children who do return to school “may suffer irreparable harm in terms of their intellectual growth, development, and future educational goals” (Fothergill & Peek, 2015, p. 271).

Despite the identification of the educational impacts of disaster as a major concern for both children and researchers, there is little to no research outlining what those long-term educational impacts actually look like in terms of school completion, school success, school achievement, or the quality of engagement when they return to school. The research cited in this section points to the importance of these questions, and the existing data is suggestive about possible negative

outcomes for some students, but we were unable to find any research on post-disaster educational outcomes over a longer recovery period. In the section below, we look at some studies that report on project-based recovery efforts with students in schools, but again, none of these educationally or school-oriented studies takes the longitudinal approach of Fothergill and Peek (2015). The existing research on the educational impacts of disaster suggest a great need for further research on the educational outcomes for children who live through disaster and the effects of disaster on schools and educators. How do different decisions about schooling in the face of disaster—for example, whether or not and for how long to close schools—have different outcomes for children? Or, what is the relationship between the child’s social-emotional world and academic experience following disaster? Now that researchers are beginning to focus on the experiences of children during and following disaster, and with schools arguably the most prominent part of children’s social-ecological contexts, there is a need for researchers to turn our attention specifically to children’s experiences of schooling and the effects of their experiences on their educational trajectories in disaster contexts.

### **The Role of Schools in Responding to Disaster**

While there is less research on the long-term educational impacts of disaster for children, a fair amount of research has focused on the role of schools in disaster response and how teachers and schools are key sites of support for children that can mitigate the negative effects of disaster (Tatebe & Mutch, 2015). Research shows that children with the best post-disaster trajectories received assistance from supportive adults and/or institutions, such as teachers and schools, dedicated to helping them (Barrett & Brown, 2008; Fothergill & Peek, 2015; Mutch & Gawith, 2014). For example, children who fit what Fothergill and Peek (2015) call the “finding-equilibrium trajectory” following Hurricane Katrina always had the support of advocates and strong institutions that could mobilize resources to support them and their families (p. 201). Teachers are key advocates for the resource mobilization that makes a difference in disaster-affected children’s lives. They are also uniquely positioned to help identify and monitor students who are experiencing mental health difficulties in the aftermath of disasters, and they are central to helping students regain a sense of constancy and routine (Fothergill & Peek, 2015; Le Brocque et al., 2017; Osofsky & Osofsky, 2018).

Studies of the structural, cultural, and social conditions that allowed youth to adjust to life after Hurricane Katrina showed that many youths turned to school personnel to help them deal with this catastrophic event. More importantly, youths who built a positive relationship with their new schools and those who had garnered positive support from an adult—especially from their teachers—managed better following the hurricane than those without such resources (Barrett et al., 2008; Fothergill & Peek, 2015). Indeed, researchers concluded that the role of schools in responding to disasters may be far more significant than previously believed: they have an important part to play in educating children affected by disasters but may also be essential in promoting the physical and emotional health of children (Barrett et al., 2008, p. 218). Beyond their primary role to educate, schools provide a safe place for children and adolescents along with practical and emotional support, and support from teachers and classmates has been identified as a significant predictor of fewer post-traumatic symptoms in children and adolescents following a large-scale disaster (Trethowan & Nursey, 2015).

Part of the critical role that schools can play during the recovery period is tied to their implementation of post-disaster curriculum and the day-to-day routine that children need (Fothergill, 2017). Research following the 2010 New Zealand earthquakes indicates that

specialized or adjusted curriculum can be a useful tool for both teachers and students in disaster recovery (Mutch, 2014), and several studies make recommendations for “utilizing the disaster within the school curriculum” (Rush et al., 2015, p. 135) by integrating disaster events into classroom activities and learning and providing students with a space to process the event (Fothergill & Peek, 2015; O’Connor & O’Connor, 2013). In the New Zealand context, researchers found that schools that focus on connection and support in the aftermath of disasters still meet their pre-disaster learning goals, and making sure that students are safe and supported with time and space to process their experience is key to maintaining academic consistency in the aftermath of a disaster (O’Connor & O’Connor, 2013).

Researchers argue that schools and especially teachers require more recognition for their role as first responders in the immediate aftermath of disasters and for the significant role they play in supporting students and their mental health in post-disaster recovery. But teachers also need support in their role as first responders. Large-scale disasters impact teachers, administrators, and other school personnel such that, while they are put in a position of being “first responders” for children and families, they are also themselves affected by disaster (Osofsky & Osofsky, 2018, p. 122) and thus require immediate and long-term support themselves in order to support students post-disaster (Fothergill & Peek, 2015; Le Brocque et al., 2017; Mutch, 2016). They need opportunities to reconnect with their fellow teachers, unpack their experiences, and process their return to the classroom, perhaps through teacher support groups (Barrett et al., 2008; Mutch, 2015). Teachers also need professional support and education on how to identify and support children who are struggling in ways that cannot be measured in terms of academic success (Le Brocque et al., 2017).

A recent preliminary report that documents teachers’ perspectives on the shift to emergency distance learning during the COVID-19 pandemic shows the value of teachers’ perspectives on the struggles of their students (Barrett, 2020). Teachers’ observations in the report focus on the negative effects of the pandemic for themselves and their students, but most importantly for the pedagogical relationship. The teachers who participated in Barrett’s study shared concerns about how emergency online instruction was further marginalizing already struggling students, the lack of student engagement and their inability to authentically assess student learning, and the disruption to their personal connections with students. While existing research suggests the importance of schools and teachers in offering support to children and their families in the immediate period following a disaster as a form of disaster response, most of this research focuses on sudden-onset natural disasters, such as earthquakes and hurricanes, and very little of it considers the nature of long-term recovery. We need to know more about the nature of the relationships between children, their schools, and their teachers as they live with and recover from slow onset events with potentially longer recovery trajectories, such as COVID-19. Barrett’s (2020) preliminary report indicates that teachers are a rich source of information, not only about their own experiences but also about the nature of students’ educational experiences during and following disaster.

## **How Should Educational Research Study COVID?**

There is an obvious need for more educational research on children’s experience of disaster, but what recommendations for further research are posed by the existing literature? How does the existing research suggest not only key areas for study but also critical methodological considerations? In the preceding sections, we have identified some key areas for further study, including 1) the long-term educational impacts of disaster for children and the ways in which those

educational outcomes reflect existing social inequalities and intersect with socio-emotional impacts, 2) the role of schools and teachers in long-term recovery from disaster for children and their families, and 3) what kinds of supports are needed by schools and teachers to provide this front-line support to children. In addition, the research suggests that of the four stages of the disaster management cycle—mitigation, preparedness, response, and recovery—recovery is the least well-understood and the least studied. And yet, for educational researchers, studying the processes of recovery, which can take many years, is critical both for understanding the effects of disaster for children and schools and for exploring the ways that schools and teachers are critical for the well-being of children and families post-disaster. If we want to better understand the effects of disaster on children and schools, we must explore their long-term recovery rather than simply their preparedness and immediate response to such experiences. This leads to the first of four methodological considerations posed by the literature: the need for longitudinal research. Other methodological recommendations explored include a focus on systems rather than individual resilience, the need for child-engaged research, and the benefits of narrative, qualitative, and arts-based approaches.

### ***The need for longitudinal research***

As Fothergill and Peek (2015) argue, post-disaster recovery is a process, it unfolds over time, and “it often occurs in uneven ways, with progress in some areas of life, and setbacks in others” (p. 31). This may be even more true in the context of pandemics and epidemics, which have very distinct characteristics in terms of how they are lived by those affected. In a pandemic, there may be what feels like an initial “event,” resulting in lockdowns and school closures, but there are also the long-term experiences of living for greater periods of time with decreased social and physical connection, the physical restrictions of mask-wearing and/or social distancing, and, for children, prolonged absences from school or lack of access to the resources required to attend school. For example, while school officially resumed for children in Toronto in September 2020 following initial school closures in March due to the COVID-19 outbreak, on October 19, 2020, nearly 2,000 students at the Toronto District School Board (TDSB) still had not received the laptops and tablets they needed to participate in schooling, which continues to be either partly or fully online at the time of writing this paper (Samba, 2020). In this way, while there are discrete events within a pandemic, such as official school closures and the resumption of classes, the temporal boundaries of children’s experiences of the pandemic are much less clear cut. Their emotional, social, and educational experiences and trajectories are affected over many years and in ways that are not always predictable or even visible.

Richardson et al. (2017) suggest that, because of the longitudinal effects of these kinds of events, terms such as “outbreak” and “epidemic” are at best misleading and at worst harmful because they create “the illusion that social suffering ends when transmission of a pathogen ceases” (p. 80). In the case of the Ebola virus outbreak in West Africa in 2013, the authors describe how millions of dollars earmarked for the Ebola response dried up when West Africa was declared free of transmission, even though their research with Ebola survivors testified to the long-term nature of their suffering “in the form of clinical sequelae, lost livelihoods and loved ones, broken communities, food insecurity, and ‘stigma’” (Richardson et al., 2017, p. 80). In their study of influenza pandemics, both the global pandemic in 1918 and the more recent epidemic in India in 1994, Barrett and Brown (2008) also document the on-going and long-term biosocial effects of stigma and particularly the long-term unequal effects of social stigma for those communities that were in fact more vulnerable to the on-going negative effects of the pandemic.

Despite the appearance that children's lives return to "normal" when, for example, school and other activities resume, all of this research suggests that children and their families experience long-term consequences from living through a pandemic like COVID-19 and that many of these consequences and experiences may be uneven and invisible. Because much of the existing research on children and disasters explores children's reactions to unexpected, sudden-onset events, we understand much less about children's experiences of slow-onset disasters, such as pandemics, and the more chronic risks they pose. As Peek (2008) and others suggest, these slow-onset disasters can cause significant ongoing hardship for children and families and generate "prolonged psychological impairment and serious developmental issues for children" (Peek, 2008, p. 12). As discussed earlier, they also may result in permanently delayed academic progress or end a child's access to schooling altogether. Given these long-term effects as well as those documented for communities who have experienced and survived recent epidemics such as Ebola and influenza, there is a significant need for more longitudinal research on children's post-disaster experiences and long-term recovery following COVID-19.

### ***A focus on systems rather than resilience***

In addition to increases to the length of time studied, existing literature suggests the need for increased breadth in our field of inquiry. Specifically, researchers argue for increased attention to the social systems in which children live rather than their individual resilience in studies of disaster risk, impact, and recovery. Historically, research that focuses on the individual resilience of children and youth as the primary determinant of their experiences during and following difficult events tends to be deficit-based, deterministic, and reductionist, viewing any struggles children face as both evidence of and the inevitable outcome of their lack of intrinsic resilience (Christmas & Khanlou, 2019). Contemporary research on children's risks and recovery from disaster is increasingly critical of this approach and is shifting away from concepts of individual resilience to social-ecological frameworks that view individuals in social context (Osofsky & Osofsky, 2018). These researchers are wary of the ways in which measures of individual resilience may function as code for the child's compliance with normative modes of behaviour (Prowell, 2019), and they question the validity of deficit-based approaches in which some children may be understood as not having enough resilience, regardless of the socio-economic and cultural systems in which they exist (Christmas & Khanlou, 2019).

Systemic approaches to risk and recovery do not entirely dismiss the importance of individual resilience traits in shaping the trajectories of children but instead insist that a child, regardless of individual traits, "cannot recover from disaster without the necessary *resources* and *social structural support*" and that the multiple systems in which children and youth are embedded most profoundly shape their outcomes (Fothergill & Peek, 2015, p. 204). Ronoh et al. (2015) argue for a reconceptualization of children's vulnerability that takes into consideration social structures as well as the historical, ideological, and cultural assumptions that lend those structures their perceived legitimacy. Insofar as social, economic, and political systems enforce sexism, racism, classism, ageism, xenophobia, and other discriminations, such structures will continue to contribute to access gaps in education, health, employment, and housing, gaps which directly impact a child's experience of COVID-19. In Canada and globally, evidence clearly indicates that existing social inequities increase risk of COVID-19 infection and severe outcomes for families and communities (Public Health Ontario, 2020). By conducting research that emphasizes the social systems that support a child's ability to thrive, we are better able to understand how children's

experiences and social conditions in the pandemic intersect with pre-existing experiences of socio-economic marginalization.

### ***The need for child-engaged research***

One of the best ways to shift the focus away from individual resilience is to engage children and youth in the research process and to hear directly from them about the complexities of their lives and experiences and the social systems in which they live. Indeed, many of those calling for increased attention to children's experiences of disaster identify a need for critically informed studies that include children's perspectives and that engage children in identifying the supports and resources that might help them and their families (Anderson, 2005; Fothergill & Peek, 2015; Gibbs et al., 2013; Mutch, 2013; Peek, 2008). Leaving children out of disaster policy or positioning them as only vulnerable has the effect of patronizing and further disenfranchising children and young people (Shepard et al., 2017; Wolmer et al., 2011), especially those children marginalized by existing inequalities. For example, Ronoh et al. (2015) describe how leaving children with disabilities out of disaster risk reduction research and planning reinforces the sense that they are inherently invaluable and that their knowledge lacks validity and reproduces them as subjects with little to offer. In contrast, researchers suggest that children be invited into the process of disaster research in a range of ways that loosely map onto a continuum of engagement, from child-related to child-focused, child-centred, and child-driven research (Mutch, 2013).

The recommendation for more child-engaged research and more participatory disaster research involving children is supported by two kinds of evidence. First, while there is obviously a different kind of value in learning about children's experiences from the adults in their lives, research has shown that adults consistently underreport levels of distress and suffering in children. For example, in one study of children's experiences following the September 11 terrorist attacks in New York, nearly half of the children surveyed (46%) reported fears of friends and family dying, while only 18% of parents reported that those same children held those same fears (Saylor et al., 2003). Parents' and other adults' lack of understanding of the impacts of disaster events on the children in their communities, as well as children's return to routine and "normal" activities, such as school, can give adults the impression that children are adapting and recovered, leading to the insufficient provision of social and emotional supports (Shepard et al., 2017; Wolmer et al., 2011). This lack of adult understanding about the experiences of children is heightened by their misconceptions of children, as described by Fothergill & Peek (2015) earlier in this paper—indeed, child-engaged studies like theirs demonstrate that adult views of children are often inaccurate.

This leads to the second point, that the recommendation for child-engaged research is also supported by the richness of data that children themselves produce when invited to participate. Indeed, when given the chance to express themselves, children are particularly creative in sharing their experiences of disaster, "including writing and drawing about the events, taking photographs, communicating with friends and supportive adults, and creating disaster jokes and games" (Peek, 2008, p. 17). Children can also contribute a great deal to the collection of data: in her study of children's stories of the New Zealand earthquakes, Mutch (2013) describes how having children be interviewed by their peers—other children rather than adult experts—can provide additional insights and lead to more candid disclosures of disaster experiences from children. Such approaches to child-driven research are informed by work in the sociology of childhood, following the Convention on the Rights of the Child (CRC) (United Nations, 1989), which argues that children's social relationships and cultures are worthy of study, independent of the perspectives and concerns of adults, and that children are, and must be seen as, active in the construction and

determination of their own lives, the lives of those around them, and of the societies in which they live (Gibbs et al., 2013).

### ***Positive impacts of qualitative, narrative, and arts-based approaches***

Sometimes adults are reluctant to let children participate in research, and particularly disaster research, out of a fear of retraumatizing them or because they have an expectation or hope that they're already "over it," but several researchers argue that participating in research can actually help affected children process disaster in a healthy way (Gibbs et al., 2013; Mutch & Gawith, 2014; Salloum & Overstreet, 2012). This seems particularly true for studies that employ qualitative, narrative, and arts-based approaches, which offer children creative opportunities to communicate about and process their experiences and emotional states. Emotional processing requires access to a diverse range of physical, cognitive, and emotional actions that offer opportunities for the metabolization of difficult emotions (Prinstein et al., 1996), and narrative and/or arts-based approaches can provide opportunities for this range of experiences. In addition, providing children with opportunities to creatively narrate their experiences can give them a greater sense of control over their own personal histories and present lives (Salloum & Overstreet, 2012). Arts-based activities are particularly critical for children who may have trouble expressing themselves verbally, either due to language development or the emotional pain of recall (Denis-Ramirez et al., 2017; Mutch & Latai, 2019).

Following the series of large earthquakes that rocked Christchurch, New Zealand, and the surrounding area in 2010 and 2011, Mutch and Gawith (2014) describe three different arts-based projects initiated to collect children's earthquake stories in three different public schools. They note that, while each school took a different approach to the collection and documentation of stories, including the development of a book, a mosaic, and a documentary film, each approach revealed the power of arts-based activities to enable children "to take a step back from their experiences in order to process their emotions and put them into a wider context" (Mutch & Gawith, 2014, p. 55). Similarly, Gibbs et al. (2013) discuss a case study in which applied theatre was used with children following the same earthquakes. The researchers describe how in their lives, these children were constrained to play the role of spectator: they were seen as having little of value to say about the state of their communities and how they hoped recovery might occur. Rather than questioning children about the trauma of the earthquake, theatre was used to reframe children as actors and agents with some control over events and it also offered a way of collecting and telling the stories of hope children held about their city (Gibbs et al., 2013).

In another more recent example, researchers used participatory visual methods to capture the distinct experiences of adolescent girls during the first lockdown from COVID-19 in Quebec (Thompson et al., Forthcoming). The province of Quebec was badly affected during the first wave of the pandemic, with more cases of infection than the rest of Canada combined (Government of Canada, 2020). Working online with girls across the province, researchers invited them to create cellphilms (short films made via cellphone) and photography to respond to the prompt "What is happening in your life right now?" Girls were also offered opportunities for co-analysis through group discussions of each other's work. The girls who participated in this study reported that their involvement in the research improved their well-being and that "taking photos, making cellphilms, and discussing their ideas together with other participants and the researchers helped [them] to address the challenges they described in relation to solitude and the heaviness ... of self-isolation" (Thompson et al., Forthcoming, p. 15).

## **Conclusion**

Listening carefully to young peoples' own narratives of experience during and following the pandemic, gathered across a range of social locations and contexts, would allow researchers to explore the educational vulnerabilities of children during and post-disaster (Mutch, 2016) and also their agency as active participants in recovery and support of others (Anderson, 2005). We need to better understand the experiences of children and young people and how natural disasters such as the COVID-19 pandemic exacerbate pre-existing inequalities as well as how we can better prepare educators for the challenges, dangers, and profound inequities young people face during events that cause significant social and economic disruption. The existing research confirms that teachers and schools can play a crucial role in responding to the struggles of young people, whether those difficulties are the result of a disruption or are amplified by it.

Indeed, educational researchers themselves can contribute to disaster recovery efforts by facilitating the development of resources and providing spaces in which children and teachers can discuss the effects of events like COVID. Following Hurricane Katrina in 2005 and the New Zealand earthquakes in 2010, researchers explicitly called for more work be done in the field of education "to be supportive of children and youth who have been affected by disaster," to develop teaching resources and curricula, and to provide "immediate and long-term support for teachers, who are often recovering from disaster themselves" (Fothergill & Peek, 2015, pp. 271–2). Researchers in both contexts identified the need for teaching materials and resources that can support both teachers and students during disaster recovery (O'Connor & O'Connor, 2013) and also the need for greater opportunities for teachers to discuss the effects of these events on their own mental health and instructional practices (Mutch, 2015). Mobilizing the resources of qualitative educational research is critical to these efforts, and researchers themselves can provide a kind of front-line support by prioritizing child-engaged and teacher-engaged research and the collaborative development of resources as a critical component of recovery efforts.

Educational research is also critical for facilitating and protecting the rights of children in such difficult times. The CRC (United Nations, 1989) specifically identifies as fundamental a child's right to give an opinion and for adults to listen and take that opinion seriously and acknowledges that children have the right to find things out and share what they think (Garlen, 2020). As Anderson (2005) points out, children need adult researchers to listen to them, to take their experiences seriously and see them as worthy of documentation, and to help them answer the questions they have about their experiences of events like COVID-19. Garlen (2020) reminds us that "all children experience sadness, grief, fear and disappointment, some earlier and in greater measure than others" and that "this is particularly true for those who face multiple or intersecting vulnerabilities and barriers" (paras. 9–10). And yet, the experience of living through a disaster can expose children and young people to new kinds of unfairness and injustice (Mort et al., 2018). Educational research can facilitate spaces that encourage dialogues, narrative, creative expression, and community action and explore new ways for adults to support children and each other and new models of teaching and schooling as we move together toward and through post-pandemic recovery.

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### Author Bios

Chloë Brushwood Rose is an Associate Professor in the Faculty of Education at York University. She is also a post-academic candidate at the Canadian Institute for Child and Adolescent Psychoanalytic Psychotherapy (CICAPP) and a clinician working with children and youth. Her research interests bridge child and youth well-being, gender and feminist theory, and participatory visual methodologies. She is co-author of *Community-based Media Pedagogies: Relational Practices of Listening in the Commons* (2016, Routledge).

Morgan Bimm is a PhD candidate in the department of Gender, Feminist, and Women's Studies at York University. Her research interests include integrating fandom studies, popular music studies, and feminist theory, particularly as they relate to questions of subcultural archives and taste cultures. Her dissertation examines the role of women, girls, and girl culture in the mainstreaming of indie rock music through 2000s-era television, film, and Internet cultures.

### References

- Ali, S. H., & Keil, R. (2006). Global cities and the spread of infectious disease: The case of Severe Acute Respiratory Syndrome (SARS) in Toronto, Canada. *Urban Studies*, 43(3), 19.
- Alliance for Healthier Communities. (2020, April 2). *Statement from Black health leaders on COVID-19's impact on Black communities in Ontario*. <https://www.allianceon.org/news/Statement-Black-Health-Leaders-COVID-19s-impact-Black-Communities-Ontario>
- Alphonso, C. (2020, December 2). Brampton, Ont. School hollowed out as nervous parents keep their children home. *The Globe and Mail*. <https://www.theglobeandmail.com/canada/article-brampton-ont-school-hollowed-out-as-nervous-parents-keep-their/>
- Anderson, W. A. (2005). Bringing children into focus on the social science disaster research agenda. *International Journal of Mass Emergencies and Disasters*, 23(3), 159–175.
- Barrett, E. J., Barron Ausbrooks, C. Y., & Martinez-Cosio, M. (2008). The school as a source of support for Katrina-evacuated youth. *Children, Youth and Environments*, 18(1), 202–235.
- Barrett, R., & Brown, P. J. (2008). Stigma in the time of influenza: Social and institutional responses to pandemic emergencies. *The Journal of Infectious Diseases*, 197(s1), s34–s37. <https://doi.org/10.1086/524986>
- Barrett, S. (2021, March). *Emergency distance learning during the COVID-19 Pandemic: Teachers' perspectives*. York University. <https://www.yorku.ca/edu/wp-content/uploads/sites/28/2021/03/Barrett-Emergency-Distance-Learning-Final-Report.pdf>
- Birken, C., Miller, S., Denburg, A., Mishna, F., Fallon, B., Sokolowski, M., Jenkins, J., Stewart, S., Levine, J., & Sistovaris, M. (2020). *Child welfare and pandemics literature scan*. Fraser Mustard Institute for Human Development. University of Toronto. [https://cwrp.ca/sites/default/files/publications/child%20Welfare%20and%20Pandemics%20Literature%20Scan\\_2020%20ENGLISH.pdf](https://cwrp.ca/sites/default/files/publications/child%20Welfare%20and%20Pandemics%20Literature%20Scan_2020%20ENGLISH.pdf)
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)

- Casserly, M. (2006). Double jeopardy: Public education in New Orleans before and after the storm. In C. Hartman (Ed.), *There is no such thing as a natural disaster: Race, class, and Hurricane Katrina* (pp. 197–214). Routledge.
- Christmas, C. M., & Khanlou, N. (2019). Defining youth resilience: A scoping review. *International Journal of Mental Health and Addiction*, 17(3), 731–742. <https://doi.org/10.1007/s11469-018-0002-x>
- Centre for Research on the Epidemiology of Disasters. (2009). *General classification*. EM-DAT: International Disaster Database. <https://www.emdat.be/classification>
- Cutter, S. L. (2017). The forgotten casualties redux: Women, children, and disaster risk. *Global Environmental Change*, 42, 117–121. <https://doi.org/10.1016/j.gloenvcha.2016.12.010>
- Denis-Ramirez, E., Sørensen, K. H., & Skovdal, M. (2017). In the midst of a ‘perfect storm’: Unpacking the causes and consequences of Ebola-related stigma for children orphaned by Ebola in Sierra Leone. *Children and Youth Services Review*, 73, 445–453. <https://doi.org/10.1016/j.childyouth.2016.11.025>
- Edwards, M. L. K. (1998). An interdisciplinary perspective on disasters and stress: The promise of an ecological framework. *Sociological Forum*, 13(1), 115–132.
- Fothergill, A. (2017, July 27). Children, youth, and disaster. *Oxford research encyclopedia of natural hazard science*. <https://doi.org/10.1093/acrefore/9780199389407.013.23>
- Fothergill, A., Maestas, E. G. M., & Darlington, J. D. (1999). Race, ethnicity and disasters in the United States: A review of the literature. *Disasters*, 23(2), 156–173. <https://doi.org/10.1111/1467-7717.00111>
- Fothergill, A., & Peek, L. (2015). *Children of Katrina*. University of Texas Press.
- Garlen, J. C. (2020, April 6). *Coronavirus isn't the end of "childhood innocence," but an opportunity to rethink children's rights*. The Conversation. <http://theconversation.com/coronavirus-isnt-the-end-of-childhood-innocence-but-an-opportunity-to-rethink-childrens-rights-134478>
- Gibbs, L., Mutch, C., O'Connor, P., & MacDougall, C. (2013). Research with, by, for and about children: Lessons from disaster contexts. *Global Studies of Childhood*, 3(2), 129–141. <https://doi.org/10.2304/gsch.2013.3.2.129>
- Gibbs, L., Nursey, J., Cook, J., Ireton, G., Alkemade, N., Roberts, M., Gallagher, H. C., Bryant, R., Block, K., Molyneaux, R., & Forbes, D. (2019). Delayed disaster impacts on academic performance of primary school children. *Child Development*, 90(4), 1402–1412. <https://doi.org/10.1111/cdev.13200>
- Government of Canada. (2020, September 13). *Coronavirus disease (COVID-19): Outbreak update*. <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>
- Kilmer, R. P., & Gil-Rivas, V. (2010). Responding to the needs of children and families after a disaster: Linkages between unmet needs and caregiver functioning. *American Journal of Orthopsychiatry*, 80(1), 135–142. <https://doi.org/10.1111/j.1939-0025.2010.01016.x>
- Krüger, F., Geiselhart, K., & Gwebu, T. (2008). Children, adolescents and the HIV and AIDS pandemic: Changing inter-generational relationships and intra-family communication patterns in Botswana. *Children, Youth and Environments*, 18(1), 99–125.
- La Greca, A. M. (2006). School-based studies of children following disasters. In F. H. Norris, S. Galea, M. J. Friedman, & P. J. Watson (Eds.), *Methods for disaster mental health research* (pp. 141–157). The Guilford Press.

- Le Brocq, R., De Young, A., Montague, G., Pocock, S., March, S., Triggell, N., Rabaa, C., & Kenardy, J. (2017). Schools and natural disaster recovery: The unique and vital role that teachers and education professionals play in ensuring the mental health of students following natural disasters. *Journal of Psychologists and Counsellors in Schools*, 27(1), 1–23. <https://doi.org/10.1017/jgc.2016.17>
- Lee, J. (2020). Mental health effects of school closures during COVID-19. *The Lancet Child & Adolescent Health*. [https://doi.org/10.1016/S2352-4642\(20\)30109-7](https://doi.org/10.1016/S2352-4642(20)30109-7)
- McGillivray, K. (2021, January 24). *School boards prepare for returning students as debate rages over safety*. CBC News. <https://www.cbc.ca/news/canada/toronto/return-to-school-covid-1.5885319>
- Mort, M., Walker, M., Williams, A. L., & Bingley, A. (2018). From victims to actors: The role of children and young people in flood recovery and resilience. *Environment and Planning C: Politics and Space*, 36(3), 423–442. <https://doi.org/10.1177/2399654417717987>
- Mutch, C. (2013). “Sailing through a river of emotions”: Capturing children’s earthquake stories. *Disaster Prevention and Management: An International Journal*, 22(5), 445–455. <https://doi.org/10.1108/DPM-10-2013-0174>
- Mutch, C. (2014). The role of schools in disaster preparedness, response and recovery: What can we learn from the literature? *Pastoral Care in Education*, 32(1), 5–22. <https://doi.org/10.1080/02643944.2014.880123>
- Mutch, C. (2015). Quiet heroes: Teachers and the Canterbury, New Zealand, earthquakes. *Australasian Journal of Disaster and Trauma Studies*, 19(2), 77–85.
- Mutch, C. (2016). Schools as communities and for communities: Learning from the 2010–2011 New Zealand earthquakes. *School Community Journal*, 26(1), 115–138.
- Mutch, C., & Gawith, E. (2014). The New Zealand earthquakes and the role of schools in engaging children in emotional processing of disaster experiences. *Pastoral Care in Education*, 32(1), 54–67. <https://doi.org/10.1080/02643944.2013.857363>
- Mutch, C., & Latai, L. (2019). Creativity beyond the formal curriculum: Arts-based interventions in post-disaster trauma settings. *Pastoral Care in Education*, 37(3), 230–256. <https://doi.org/10.1080/02643944.2019.1642948>
- Navarro, J., Pulido, R., Berger, C., Arteaga, M., Osofsky, H. J., Martinez, M., Osofsky, J. D., & Hansel, T. C. (2016). Children’s disaster experiences and psychological symptoms: An international comparison between the Chilean earthquake and tsunami and Hurricane Katrina. *International Social Work*, 59(4), 545–558. <https://doi.org/10.1177/0020872814537850>
- Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981–2001. *Psychiatry: Interpersonal and Biological Processes*, 65(3), 207–239. <https://doi.org/10.1521/psyc.65.3.207.20173>
- O’Connor, P., & O’Connor, P. (2013). Pedagogy of love and care: Shaken schools respond. *Disaster Prevention and Management: An International Journal*, 22(5), 425–433. <https://doi.org/10.1108/DPM-10-2013-0176>
- Osofsky, J. D., & Osofsky, H. J. (2018). Challenges in building child and family resilience after disasters. *Journal of Family Social Work*, 21(2), 115–128. <https://doi.org/10.1080/10522158.2018.1427644>
- Peek, L. (2008). Children and disasters: Understanding vulnerability, developing capacities, and promoting resilience — an introduction. *Children, Youth and Environments*, 18(1), 1–29.

- Peek, L., & Stough, L. M. (2010). Children with disabilities in the context of disaster: A social vulnerability perspective. *Child Development*, 81(4), 1260–1270. <https://doi.org/10.1111/j.1467-8624.2010.01466.x>
- Prinstein, M. J., La Greca, A. M., Vernberg, E. M., & Silverman, W. K. (1996). Children's coping assistance: How parents, teachers, and friends help children cope after a natural disaster. *Journal of Clinical Child Psychology*, 25(4), 463–475. [https://doi.org/10.1207/s15374424jccp2504\\_11](https://doi.org/10.1207/s15374424jccp2504_11)
- Prowell, A. N. (2019). Using post-structuralism to rethink risk and resilience: Recommendations for social work education, practice, and research. *Social Work*, 64(2), 123–130.
- Public Health Ontario. (2020). *COVID-19 – What we know so far about... social determinants of health*. Queen's Printer for Ontario. [https://www.publichealthontario.ca/-/media/documents/ncov/covid-wwksf/2020/05/what-we-know-social-determinants-health.pdf?sc\\_lang=en](https://www.publichealthontario.ca/-/media/documents/ncov/covid-wwksf/2020/05/what-we-know-social-determinants-health.pdf?sc_lang=en)
- Reid, M. (2013). Disasters and social inequalities. *Sociology Compass*, 7(11), 984–997. <https://doi.org/10.1111/soc4.12080>
- Richardson, E. T., Kelly, J. D., Sesay, O., Drasher, M. D., Desai, I. K., Frankfurter, R., Farmer, P. E., & Barrie, M. B. (2017). The symbolic violence of 'outbreak': A mixed-methods, quasi-experimental impact evaluation of social protection on Ebola survivor wellbeing. *Social Science & Medicine*, 195, 77–82. <https://doi.org/10.1016/j.socscimed.2017.11.018>
- Risso-Gill, I., & Finnegan, L. (2015). *Children's Ebola recovery assessment: Sierra Leone*. Save the Children, World Vision International, Plan International and UNICEF. <https://www.savethechildren.org/content/dam/global/reports/emergency-humanitarian-response/ebola-rec-sierraleone.pdf>
- Ronoh, S., Gaillard, J. C., & Marlowe, J. (2015). Children with disabilities and disaster risk reduction: A review. *International Journal of Disaster Risk Science*, 6(1), 38–48. <https://doi.org/10.1007/s13753-015-0042-9>
- Rush, S. C., Houser, R., & Partridge, A. (2015). Rebuilding sustainable communities for children and families after disaster: Recommendations from symposium participants in response to the April 27<sup>th</sup>, 2011 tornadoes. *Community Mental Health Journal*, 51(2), 132–138. <https://doi.org/10.1007/s10597-014-9780-1>
- Salloum, A., & Overstreet, S. (2012). Grief and trauma intervention for children after disaster: Exploring coping skills versus trauma narration. *Behaviour Research and Therapy*, 50(3), 169–179. <https://doi.org/10.1016/j.brat.2012.01.001>
- Samba, M. (2020, October 19). *Nearly 2,000 TDSB students still waiting to receive laptops, tablets for virtual learning*. CBC News. <https://www.cbc.ca/news/canada/toronto/tdsb-students-devices-for-remote-learning-1.5766694>
- Saylor, C. F., Cowart, B. L., Lipovsky, J. A., Jackson, C., & Finch, A. J. (2003). Media exposure to September 11: Elementary school students' experiences and posttraumatic symptoms. *American Behavioral Scientist*, 46(12), 1622–1642. <https://doi.org/10.1177/0002764203254619>
- Shepard, B., Kulig, J., & Botey, A. P. (2017). Counselling children after wildfires: A school-based approach. *Canadian Journal of Counselling and Psychotherapy*, 51(1), 61–80.
- Smilde-van den Doel, D. A., Smit, C., & Wolleswinkel-van den Bosch, J. H. (2006). School performance and social-emotional behavior of primary school children before and after a disaster. *Pediatrics*, 118(5), 1311–1320. <https://doi.org/10.1542/peds.2005-2781>

- Tatebe, J., & Mutch, C. (2015). Perspectives on education, children and young people in disaster risk reduction. *International Journal of Disaster Risk Reduction*, 14, 108–114. <https://doi.org/10.1016/j.ijdr.2015.06.011>
- Thomas, D. S. K., Phillips, B. D., Lovekamp, W. E., & Fothergill, A. (2013). *Social vulnerability to disasters*. Taylor & Francis Group.
- Thompson, J. A., Fraser, S. L., Macabena Perez, R., Paquette, C., & Frohlich, K. L. (Forthcoming). Girls and young women negotiate wellbeing during COVID-19 in Quebec. *Girlhood Studies*, 13(3).
- Trethowan, V., & Nurse, J. (2015). Helping children and adolescents recover from disaster: A review of teacher-based support programs in Victorian schools. *Australian Journal of Emergency Management*, 30(4), 17. <https://search.informit.org/doi/10.3316/informit.595495258856545>
- United Nations. (1989). *The United Nations Convention on the Rights of the Child*. <https://www.unicef.org/child-rights-convention/convention-text#>
- VAW Learning Network. (2020). “More exposed & less protected” in Canada: Racial inequality as systemic violence during COVID-19. Western University. <http://www.vawlearningnetwork.ca/docs/Systemic-Racism-Covid-19-Backgrounder.pdf>
- Vogel, G. & Couzin-Frankel, J. (2020, May 4). *Should schools reopen? Kids’ role in pandemic still a mystery*. Science, AAAS. <https://www.sciencemag.org/news/2020/05/should-schools-reopen-kids-role-pandemic-still-mystery>
- Wallis, C. (2020, June 12). Why racism, not race, is a risk factor for dying of COVID-19. *Scientific American*. <https://www.scientificamerican.com/article/why-racism-not-race-is-a-risk-factor-for-dying-of-covid-191/>
- Weissbecker, I., Sephton, S. E., Martin, M. B., & Simpson, D. M. (2008). Psychological and physiological correlates of stress in children exposed to disaster: Current research and recommendations for intervention. *Children, Youth and Environments*, 18(1), 30–70. <https://www.jstor.org/stable/10.7721/chilyoutenvi.18.1.0030>
- Wolmer, L., Hamiel, D., Barchas, J. D., Slone, M., & Laor, N. (2011). Teacher-delivered resilience-focused intervention in schools with traumatized children following the second Lebanon war. *Journal of Traumatic Stress*, 24(3), 309–316. <https://doi.org/10.1002/jts.2063>
- 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>
- Yaya, S., Yeboah, H., Charles, C. H., Otu, A., & Labonte, R. (2020). Ethnic and racial disparities in COVID-19-related deaths: Counting the trees, hiding the forest. *BMJ Global Health*, 5(6), 1–5. <https://doi.org/10.1136/bmjgh-2020-002913>

