Question: What does the research say about the effects of large-scale traumatic events on historically disadvantaged communities and young children that may inform us on the potential educational and social-emotional impacts of COVID-19 on youth and families?

Response:

Thank you for your request to our Regional Educational Laboratory (REL) Reference Desk regarding evidence-based research about the effects of large-scale traumatic events on historically disadvantaged communities and young children that may inform us on the potential educational and social-emotional impacts of COVID-19 on youth and families.

Ask A REL is a collaborative reference desk service provided by the 10 RELs that, by design, functions much in the same way as a technical reference library. Ask A REL provides references, referrals, and brief responses in the form of citations in response to questions about available education research.

Following an established REL Northwest research protocol, we conducted a search for evidence-based research about the effects of large-scale traumatic events on historically disadvantaged communities and young children that may inform us on the potential educational and social-emotional impacts of COVID-19 on youth and families. The sources included ERIC and other federally funded databases and organizations, research institutions, academic research databases, Google Scholar, and general Internet search engines. For more details, please see the methods section at the end of this document.

The research team has not evaluated the quality of the references and resources provided in this response; we offer them only for your reference. The search included the most commonly used research databases and search engines to produce the references presented here. References are listed in alphabetical order, not necessarily in order of relevance. The research references are not necessarily comprehensive and other relevant research references may exist. In addition to evidence-based, peer-reviewed research references, we have also included other resources that you may find useful. We provide only publicly available resources, unless there is a lack of such resources or an article is considered seminal in the topic area. If links to resources do not automatically open when clicked, copy the URL and paste it directly into a browser to access.
From the abstract: “Community traumatic events such as mass shootings, terrorist attacks, and natural disasters have the potential to disrupt student learning. For example, these events can reduce instructional time by causing teacher and student absences, school closures, and disturbances to classroom and home routines. This paper uses a quasi-experimental research design to identify the effects of the 2002 "Beltway Sniper" attacks on student achievement in Virginia's public elementary schools. To identify the causal impact of these events, the empirical analysis uses a difference-in-differences strategy that exploits geographic variation in schools' proximity to the attacks. The main results indicate that the attacks significantly reduced school-level proficiency rates in schools within five miles of an attack. Evidence of a causal effect is most robust for math proficiency rates in the third and fifth grades, and third-grade reading proficiency, suggesting that the shootings caused a decline in school proficiency rates of about 2 to 5 percent. Particularly concerning from an equity standpoint, these effects appear to be entirely driven by achievement declines in schools that serve higher proportions of racial minority and socioeconomically disadvantaged students. Finally, results from supplementary analyses suggest these deleterious effects faded out in subsequent years.”

From the abstract: “Research exhibits a robust relation between child hurricane exposure, parent distress, and child posttraumatic stress disorder (PTSD). This study explored parenting practices that could further explicate this association. Participants were 381 mothers and their children exposed to Hurricane Katrina. It was hypothesized that 3–7 months (T1) and 14–17 months (T2) post-Katrina: (a) hurricane exposure would predict child PTSD symptoms after controlling for history of violence exposure and (b) hurricane exposure would predict parent distress and negative parenting practices, which, in turn, would predict increased child PTSD symptoms. Hypotheses were partially supported. Hurricane exposure directly predicted child PTSD at T1 and indirectly at T2. Additionally, several significant paths emerged from hurricane exposure to parent distress and parenting practices, which were predictive of child PTSD.”

From the abstract: "Since March 2020, families across the U.S. have faced challenges due to the novel Coronavirus (COVID-19) and its subsequent restrictions. Prior literature
has linked family stress to negative outcomes, such as parent and child mental health, increased risk of child maltreatment, and overall well-being, as well as protective factors that may help families navigate and respond to stressors. Furthermore, parental history of trauma, such as exposure to adversity in one’s own childhood, has been linked to stress and resilience. Although some experts have voiced concern over the impact of COVID-19 on family well-being, few studies have been conducted thus far. This study utilized N = 523 responses from an online survey that was administered between May and June 2020 to gauge family stress and resilience among parents of children ages zero-to-five during the pandemic. There was a negative relationship between ACE score and parental resilience among this sample. Furthermore, frequency of childcare was positively linked to protective factors and resilience, while childcare barriers were negatively linked to resilience. Implications for practice, policy, and research are discussed, with a particular focus on the role of childcare and school openings during the pandemic.”


*From the abstract:* “This study examines the association between trauma exposure and posttraumatic stress disorder (PTSD) among 157 help-seeking children (aged 8-17). Structured clinical interviews are carried out, and linear and logistic regression analyses are conducted to examine the relationship between PTSD and type of trauma exposure controlling for age, gender, and ethnicity. Confrontation with traumatic news, witnessing domestic violence, physical abuse, and sexual abuse are each significantly associated with PTSD. Witnessing a crime, being the victim of a crime, and exposure to accidents, fire, or disaster are not associated with PTSD. These findings underscore the association between interpersonal violence and childhood PTSD.”


*From the abstract:* “In the context of rising disasters worldwide and the challenges of the COVID-19 pandemic, this commentary considers the implications of findings in resilience science on children and youth for disaster preparation and response. The multisystem challenges posed by disasters are illustrated by the COVID-19 pandemic. We discuss the significance of disasters in the history of resilience science and the emergence of a unifying systems definition of resilience. Principles of a multisystem perspective on resilience and major findings on what matters for young people in disasters are delineated with reference to the pandemic. Striking parallels are noted in the psychosocial resilience factors identified at the level of individual children, families,
schools, and communities. These parallels suggest that adaptive capacities associated with resilience in these interacting systems reflect interconnected networks and processes that co-evolved and may operate in concert. As resilience science moves toward integrated theory, knowledge, and applications in practice, particularly in disaster risk reduction and resilience promotion, more focus will be needed on multisystem and multidisciplinary research, communication, training, and planning.”


From the abstract: “This publication provides an overview of studies conducted on different segments of the population and the psychological reactions of respondents to the devastating events of September 11, 2001. This investigation stems out of an intellectual curiosity to learn about the psychological impact of this tragedy in general, and to retrieve studies conducted on families who lost loved ones in particular. To this end, a comprehensive review of the medical and psychological literature was conducted in order to retrieve original research, peer-reviewed journal articles published between October 2001 and December 2006. Findings suggest that the September 2001 terrorist attacks attributed to widespread psychological and emotional problems.”


From the abstract: “Background Research suggests that young childhood is a dynamic developmental phase during which risks to attachment figures as well as traumatic events may be particularly important. The loss and disruption associated with Hurricane Katrina highlighted the vulnerabilities and special needs of young children exposed to natural disaster. Objective The current study explored ways in which multiple stressors associated with Hurricane Katrina contributed to adverse outcomes. We hypothesize overall decreases in trauma symptoms over time. We further hypothesize that increased attachment and hurricane related risk factors will negatively influence longitudinal symptom patterns. Methods Data was collected from families of preschool-aged children (ages 3–5) during the school year following Hurricane Katrina (2005–2006) and each subsequent school year (2006–2007, 2007–2008, and 2008–2009). Latent growth curve modeling was used to assess trauma symptoms overtime and the effect of risk indices on these trauma symptoms. Results Results suggest an overall decrease in trauma distress symptoms over time and further indicate that attachment and trauma related risks of caregiver disruption, other nonhuman losses, trauma prior to and subsequent to the storm, as well as Katrina exposure are significant predictors of symptoms over time. Conclusions Given the rapid physical, cognitive, and emotional development that occurs in early childhood, these findings support the importance of providing intervention with
preschool age children post-disaster. Further, the findings also suggest that a relationship based treatment including both caregiver and child is most likely to be effective.”


*From the abstract:* “As a result of the COVID-19 pandemic, many school districts have closed for the remainder of the academic year. These closures are unfortunate because, for many students, schools are their only source of trauma-informed care and supports. When schools reopen, they must develop a comprehensive plan to address the potential mental health needs of their students.”


*From the abstract:* “Though adults undoubtedly suffer tremendous stress in the aftermath of natural disasters such as Hurricanes Harvey, Irma, and Maria, it is often the most vulnerable, the children, who are most traumatized and possess the fewest coping skills. Signs of child psychological trauma such as symptoms commonly associated with posttraumatic stress disorder (PTSD) may be evident in the days and weeks following a natural disaster but what might not be immediately noticeable is the effect of trauma on a child's developing brain (e.g., Anda et al., 2006; Perry, 2002; Perry & Pollard, 1998; Perry, Pollard, Blakley, Baker, & Vigilante, 1995). Youth living in urban or high-poverty areas, those with the greatest susceptibility to PTSD after a natural disaster, were among the populations most impacted by the recent hurricanes in the United States and its territories. At the time of Hurricane Katrina, there was little to no guidance on the type of empirical interventions most appropriate for children affected by such a disaster (Jaycox et al., 2010). Therefore, a number of studies were conducted as a result of the lack of evidence-based guidelines to prepare and respond to a catastrophic natural disaster. Herein, the authors outline findings from selected studies to aid school personnel and independent practitioners in the preliminary planning of crisis intervention for children negatively impacted by natural disasters. These recommendations are not exhaustive and only account for minimal considerations in planning efforts.”


*From the abstract:* “The mental health consequences of the COVID-19 pandemic are particularly relevant in African-American communities because African-Americans have been disproportionately impacted by the disease, yet they are traditionally less engaged in mental health treatment compared with other racial groups. Using the state of Michigan
as an example, we describe the social and psychological consequences of the pandemic on African-American communities in the United States, highlighting community members’ concerns about contracting the disease, fears of racial bias in testing and treatment, experiences of sustained grief and loss, and retraumatization of already-traumatized communities. Furthermore, we describe the multilevel, community-wide approaches that have been used thus far to mitigate adverse mental health outcomes within our local African-American communities.”


From the document: “This issue of the Supplemental Research Bulletin focuses on mental health and substance use (behavioral health) conditions in children and adolescents following exposure to natural disasters such as hurricanes, tornadoes, and earthquakes. Each year, natural disasters affect an average of 224 million individuals worldwide, and about 85.2 million in North America. In the United States, the average number of natural disasters per year over the past decade was 21.5, making the United States one of the top five countries in the world in terms of how frequently it was hit by natural disasters (Guha-Sapir, Hoyois, Wallemacq, & Below, 2017). Winter storm Jonas alone (2016) affected about 85 million people (Guha-Sapir et al., 2017). Children under the age of 18 comprise nearly 25 percent of the United States’ population, or 74 million Americans (National Commission on Children and Disasters, 2010). In a representative sample of children ages 2 to 17 years, 13.9 percent had been exposed to a disaster in their lifetime, while 4.1 percent of the sample reported experiencing a disaster in the past year (Becker-Blease, Turner, & Finkelhor, 2010). As these statistics reflect, many children are exposed to disasters, and they constitute a population with particular risks and needs during and after disasters (Becker-Blease, Turner, & Finkelhor, 2010; National Commission on Children and Disasters, 2010).”


From the abstract: “This study examined the stability of post traumatic stress disorder (PTSD) symptoms in a predominantly ethnic minority sample of youth exposed to Hurricane Katrina. Youth (n=191 grades 4th thru 8th) were screened for exposure to traumatic experiences and PTSD symptoms at 24 months (Time 1) and then again at 30 months (Time 2) post-disaster. PTSD symptoms did not significantly decline over
time and were higher than rates reported at earlier time points for more ethnically diverse samples. Younger age, female sex, and continued disrepair to the child’s home predicted stable elevated PTSD symptoms. Findings are consistent with predictions from contextual theories of disaster exposure and with epidemiological data from adult samples suggesting that the incidence of PTSD post Katrina is showing an atypical pattern of remittance. Theoretical, applied, and policy implications are discussed.”

Methods

Keywords and Search Strings
The following keywords, subject headings, and search strings were used to search reference databases and other sources:

“Collective trauma”
“Disruptive events”
“Large-scale”
“Trauma”
“Disadvantaged”
“Community”
“Traumatic events”
“Disasters”
“Traumatic”
“COVID-19”
“Child development”
“Education”

Databases and Resources
We searched ERIC for relevant resources. ERIC is a free online library of more than 1.6 million citations of education research sponsored by the Institute of Education Sciences (IES). Additionally, we searched Google Scholar and EBSCO databases (Academic Search Premier, Education Research Complete, and Professional Development Collection).

Reference Search and Selection Criteria
When we were searching and reviewing resources, we considered the following criteria:
**Date of publications:** This search and review included references and resources published in the last 12 years (since 2008).

**Search priorities of reference sources:** Search priority was given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, as well as academic databases, including ERIC, EBSCO databases, and Google Scholar.

**Methodology:** The following methodological priorities/considerations were given in the review and selection of the references:

- Study types: randomized control trials, quasi experiments, surveys, descriptive data analyses, literature reviews, and policy briefs, generally in this order
- Target population and samples: representativeness of the target population, sample size, and whether participants volunteered or were randomly selected
- Study duration
- Limitations and generalizability of the findings and conclusions

This memorandum is one in a series of quick-turnaround responses to specific questions posed by educational stakeholders in the Northwest Region (Alaska, Idaho, Montana, Oregon, and Washington), which is served by the Regional Educational Laboratory Northwest at Education Northwest. This memorandum was prepared by REL Northwest under a contract with the U.S. Department of Education’s Institute of Education Sciences (IES), Contract ED-IES-17-C-0009, administered by Education Northwest. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.