The Urban Review (2026) 58:28
https://doi.org/10.1007/s11256-026-00808-5

# Same Storm, Different Boat: Student Homelessness & Natural Disaster

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Received: 28 March 2025 / Accepted: 5 February 2026


**Abstract**
Due to climate change, natural disasters are increasingly frequent and severe. Moreover, they may have profound educational consequences for students, hindering their attendance, achievement, and wellbeing – particularly for those experiencing homelessness. Yet there is a dearth of research on student homelessness in the context of natural disasters. In this study, we use an environmental justice lens to explicate how student homelessness intersected with the phases of natural disaster in the context of one of the biggest natural catastrophes in American history – Hurricane Harvey in Houston, Texas. We draw on semi-structured interviews with parents experiencing homelessness ($n=10$), district-level educational leaders ($n=9$), and anti-poverty community providers ($n=19$). We foreground not only families' personal experiences with homelessness and disaster, but also how supportive organizations, such as schools and social service providers, adapted to the different phases of the crisis. Our findings unearthed important procedural injustices in the preparation and recovery stages of disaster. We conclude with implications for theory, practice, research, and policy in today's uncertain political landscape.

**Keywords** Homelessness · Natural disaster · Hurricane · Environmental justice

In 2024, there were 27 weather- or climate-related disasters in the United States where financial losses were more than a billion dollars (CPI-adjusted), compared to only 9 per year from 1980 to 2024 (NOAA National Centers for Environmental Information, 2025). From wildfires in California to hurricanes and tropical storms in Georgia, North Carolina, and South Carolina, natural disasters are becoming increasingly frequent and intense due to climate change (NASA, 2022; Villalobos, 2010).

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Published online: 21 February 2026

Moreover, vulnerability and responses to crises are inextricable from poverty as well as gender, race, ethnicity, geography, disability, and other contextual factors. Members of marginalized groups tend to have fewer choices, more practical constraints, and fewer resources to buffer from crises or aid in recovery (Enarson et al., 2018; Fothergill, 1996). And recovery from natural disasters is often protracted: For example, 20 years after Hurricane Katrina, New Orleans continues to feel the disaster's lasting impact (Allen & Peñaloza, 2025).

From an education perspective, natural disasters can have deleterious effects on student attendance, academic achievement, and mental health, particularly for students of color (Baum et al., 2009; Jaycox et al., 2010; Kousky, 2016; Saint Gilles & Carlson, 2015; Simmons & Douglas, 2018). But natural disasters pose unique threats to students experiencing homelessness,[1] who are already generally at risk of lower test scores and grades and exhibit higher rates of social isolation, school mobility, and school dropout even in the absence of natural disasters (Hallett et al., 2025; Miller, 2011).

Unfortunately, there is a dearth of qualitative research on how students experiencing homelessness also endure natural disasters – and how schools and community organizations can and should support them (Richards et al., 2024). Moreover, while natural disasters are often presented as a discrete event, natural disasters are better conceived of as a temporal continuum, from preparedness to response to recovery (Mutch, 2015). In this study, we use an environmental justice lens (Mohai et al., 2009) to explicate how student homelessness intersected with the phases of natural disaster in the context of one of the biggest natural catastrophes in American history – Hurricane Harvey in Houston, Texas. In doing so, we not only foreground families' personal experiences with homelessness and disaster, but also how the organizations that support them, such as schools and social service providers, adapted to the different phases of the crisis.

## Literature Review

Across disciplines, research suggests that crises unfold in distinct phases (McAdams & Keener, 2008; U.S. Department of Education, 2013). Research on natural disasters often emphasizes pre-crisis and post-crisis phases, highlighting a distinction between the initial emergency response and the subsequent short- and long-term recovery processes (Mutch, 2015). Specifically, crises are often delineated into three phases: Preparedness, response, and recovery. The *preparedness* phase captures the pre-crisis period during which communities, organizations, or individuals attempt to reduce their vulnerability to a future hypothetical or impending disaster (Mutch, 2015; Oloruntoba et al., 2018). The *response* phase is the immediate response to a disaster and often includes a "honeymoon" period characterized by "heightened internal solidar-

[1] The phrase "experiencing homelessness" is deliberate. It aligns with the McKinney-Vento Homeless Assistance Act, emphasizes that homelessness is an experience (not an identity), and avoids misunderstandings. See: https://schoolhouseconnection.org/article/why-we-use-the-phrase-experiencing-homelessness

ity, a sense of unity, a disappearance of community conflicts, a utopian mood, an overall sense of altruism, and heroic action" (Bonanno et al., 2010, p. 25). Lastly, the *recovery* phase captures the long-term impact of the disaster with a focus on restoring the community to its pre-disaster state (Mutch, 2015; Oloruntoba et al., 2018).

In her review of literature on schools and natural disasters, Mutch (2015) found a heavy emphasis on risk reduction and preparedness, a growing body of research on schools' response to disasters, but less attention on recovery. Educational research on crises often emphasizes the social, emotional, and psychological effects on K-12 students who experienced a disaster (Mutch, 2015), with limited focus on the systems-level responses of schools to such events. Other research, conducted in post-Katrina New Orleans, has a uniquely distinct focus on school choice and the charter schools that were characteristic of the restructured post-Katrina school system (Saltman, 2015). Overall, however, little education literature examines the role of schools and communities within and across these disaster phases.

Below, we turn to the extant literature related to natural disasters and students experiencing homelessness in the educational context. First, we focus on the impact of natural disasters on students. Next, we attend to the broader research on the roles of schools in natural disasters and other crises. Finally, we examine the existing literature on the intersection of natural disasters and student homelessness.

## Students & Natural Disasters

Worldwide, 175 million children are impacted by natural disasters annually (Codreanu et al., 2014). In the U.S. alone, approximately 14% of our nation's children will experience a natural disaster (Self-Brown et al., 2013), the occurrence of which is steadily increasing due to climate change (Dyregrov et al., 2018). Children have a particularly difficult time recovering from a natural disaster because they may lack the skills and resources necessary to process the trauma (Baum et al., 2009). Natural disasters can have tremendous impacts on students' emotional and psychological well-being as well as their academic performance and attendance (Kousky, 2016; Thamtanajit, 2020).

However, natural disasters do not impact all students in the same way - those most socially vulnerable tend to experience the most catastrophic impacts. Children's responses to natural disaster may be influenced by previous trauma (Clettenberg et al., 2011), which children of color and children from low-income families are more likely to have endured (Saint Gilles & Carlson, 2015). Jaycox and colleagues (2010) found that students who had experienced prior trauma displayed particularly high levels of post-traumatic stress disorder (PTSD) symptoms. Likewise, when students living in poverty, who are disproportionately likely to be racially minoritized, confront a natural disaster, they were more vulnerable to psychological trauma than their wealthier peers (Simmons & Douglas, 2018). Furthermore, in their study of Texas schools impacted by Hurricane Ike in 2008, Lai and colleagues (2019) found that schools with lower performance on state standardized tests recovered more slowly.

## Student Homelessness & Natural Disasters

By virtue of their housing status, students experiencing homelessness face unique barriers to educational success. High levels of stress and school mobility can coalesce with many of the challenges associated with poverty such as food insecurity, limited access to primary care, or even appropriate space to do homework (Miller, 2011). Since students of color also disproportionately experience homelessness, their encounters with housing instability intersect with structural racism and discrimination, both inside and outside of schools (Aviles de Bradley, 2015a, 2015b; Edwards, 2021). Research suggests that students experiencing homelessness are more likely to suffer from lower grades, test scores, and graduation rates than their housed peers (Hallett et al., 2025; Pavlakis et al. 2017).

A relatively small body of literature on students who become homeless due to natural disasters demonstrates that such students are negatively impacted and may have unique needs. Longitudinal research on Hurricane Katrina demonstrates that in the two years after the hurricane, displaced students had higher rates of negative behaviors and lower academic performance than their nondisplaced peers (Ward et al., 2008). Another study of students affected by Hurricane Katrina found that displacement to a shelter and prior trauma was associated with higher PTSD symptoms two years later (Osofsky et al., 2009). Displacement from natural disaster may also lead to unplanned school mobility, a construct that can, on its own, negatively impact student achievement and wellbeing (e.g., Reynolds et al., 2009).

However, we know very little about the impact of natural disasters on those who were already homeless. Even research that focuses on housing status as a factor in displaced individuals' emotional response to a natural disaster (e.g., Merdjanoff, 2013) does not account for people who were homeless prior to the natural disaster. And when homelessness is discussed in the natural disaster literature, it almost always examines adults, rather than students (e.g., Fogel, 2017; Kaniasty et al., 1990; Reed et al., 2018; White, 2014).

## Schools and Natural Disasters

Schools play a critical role in responding to natural disasters for students, families, and communities (Coombe et al., 2015; Mutch, 2015; Pfefferbaum et al., 2014). After a natural disaster, schools help families regain a sense of normalcy and stability by giving students the expected structure associated with a typical school day (NCHE, 2007, 2015). Additionally, while students are at school, parents can attend to pressing matters related to disaster recovery (NCHE, 2015). In the wake of disasters, schools that close due to damage may also impact educational outcomes above and beyond a student's individual experiences with homelessness (Kuhfield et al., 2025). However, research typically focuses on schools' disaster risk reduction during the preparation phase (Mutch, 2014), which does not capture the extensive role schools play in a disaster's wake.

Many best practices for addressing homelessness during or after a natural disaster reflect McKinney-Vento Homeless Assistance Act guidelines for all students experiencing homelessness (National Center for Homeless Education [NCHE], 2007,

2015). McKinney-Vento requires each district to have a liaison who helps ensure that families know their rights, including free school meals without income verification and the right to remain in their school of origin for the duration of their homelessness or until the end of the school year during which they secure permanent housing, even without proof of residence and other documents typically required for enrollment (NCHE, 2007, 2015). For students who have lost their homes due to a disaster, this provision affords them a measure of stability during an unstable time (NCHE, 2015).

Schools are often used to deliver a range of supports for students after a natural disaster, such as mental health services (e.g., Baum et al., 2009; Simmons & Douglas, 2018; Yohannan & Carlson, 2019) and assistance securing affordable housing (Coombe et al., 2015; Lai et al., 2019; Pfefferbaum et al., 2014). Schools can also provide a stable environment (Barrett et al., 2012) and access to supportive adults, which can be protective (Dias & Cadime, 2017).

However, schools can face barriers including limited funding and not enough trained personnel (Cohen et al., 2009; Jaycox et al., 2007). For instance, Jaycox and colleagues (2007) suggested that schools provided inadequate mental health support to students who experienced hurricanes, often offering services briefly after the disaster and not identifying students' needs systematically. Barrett and colleagues (2012) found that teachers felt inadequately prepared to support students who relocated to the Dallas-Fort Worth metropolitan area due to Hurricane Katrina. Even with adequate training, teachers may have their own trauma-related needs that may problematize helping students cope with their trauma (Baum et al., 2009). Likewise, principals may also be required to provide additional leadership during natural disasters – such as attending to their staff's socio-emotional needs on top of other responsibilities to support the broader surrounding community (Fletcher & Nicholas, 2016). Recognizing school personnels' limitations, partnerships with community organizations can reduce the burden (Clettenberg et al., 2011; Simmons & Douglas, 2018).

## Theory

Dismantling artificial barriers between environmental and social issues (Klein & Riemer, 2011), a large body of scholarship has demonstrated that marginalized groups face higher levels of exposure to environmental hazards (Mohai et al., 2009). This uneven distribution has been called environmental racism, environmental inequality, environmental injustice and, eventually, environmental justice (EJ), a term coined by Bullard to be solution oriented (Benford, 2005). Bullard defines EJ as the principle that "all people and communities are entitled to equal protection of environmental and public health laws and regulations" (Mohai et al., 2009, p. 407). In EJ, the "environment" often includes not only the natural world of forests and lakes, but also socially constructed and human-made spaces (Schweizer, 1999),

Critical environmental justice (CEJ) (Pellow, 2018; see also Goodling, 2020), extends – rather than replaces – EJ in several ways. Namely, it more clearly emphasizes intersectionality and how various forms of identity and inequities overlap; for example, it may explore how disability *and* gender shape vulnerability to environmental hazards above and beyond their individual impacts. We recognize the

disproportionality in homelessness by disability, race, and other factors, while simultaneously cautioning against framing homelessness as an identity.

CEJ also highlights the state's role in maintaining the status quo (e.g., inequities) across spaces and time. In the context of this study, the state not only refers to federal agencies such as the Federal Emergency Management Agency (FEMA), but also to public schools and other formal institutions. CEJ argues for more than pragmatic tweaks to social change, encouraging courses of action, such as grassroots organizing, that move beyond a heavy reliance on the state (Pellow, 2018).

Traditionally, EJ research focused on distributive justice, or equity issues that emerged from how environmental hazards were distributed amongst places and people. However, more recent scholarship aligned with CEJ has argued that distributive justice is not sufficient because it often overlooks the foundational power dynamics that enabled environmental problems (Pellow, 2018; Schlosberg, 2004). In response, this scholarship has broadened conceptualizations of justice to include *procedural justice*, which "shifts the lens from distributive outcomes to decision-making processes and the importance of recognition of excluded and/or aggrieved groups" (Pellow, 2018, p.12). Procedural justice focuses on fair processes and experiences; it emphasizes that people's perceptions of what is fair is shaped by their experiences in the process. For example, when a driver is pulled over by a police officer, the driver's views on the experience relates less to whether they received a ticket (the outcome), and more to whether they were treated fairly in the process (The Justice Collaboratory, n.d.).

Coupled with inequalities by race and class in the distribution of and experiences with environmental hazards (United States Interagency Council on Homelessness [USICH], 2023), histories of redlining and housing discrimination in the U.S. have contributed to lower rates of homeownership in communities of color even prior to disaster (Desmond, 2016). Due to racism and discrimination, Black and Latine communities have historically and contemporarily faced disinvestment in the access and quality of schools and other services (Aviles de Bradley, 2015a, 2015b; Edwards, 2021), creating procedural injustices in daily life. Additionally, female heads of households with children are often the most at risk of eviction, increasing their chances of homelessness (Desmond, 2016).

Yet there is scant research using environmental justice in homelessness contexts. Rose's (2014) ethnography of adults experiencing homelessness in a municipal park explored the relationship between social and environmental justice. Goodling (2020) applied a CEJ framework to homelessness through 47 phone surveys of houseless community representatives, finding that environmental hazards exacerbated other forms of systemic violence based on race, gender, and disability. However, to the best of our knowledge, this study is the first to apply insights from EJ and CEJ specifically to student and family homelessness.

Together, EJ and CEJ can help us understand why and how certain groups are disproportionately impacted by natural disasters (Johnson, 2008). For instance, the intersection of homelessness with disability or race; the role of the state, such as FEMA or school policies; the distribution of hazards; and the procedural experiences with oppression may help explain not just what happens to certain groups but also why they may experience disaster in the ways that they do.

## Method

### Study Context

In this study, we examine how one natural disaster – Hurricane Harvey – shaped student homelessness in Houston, Texas. Houston is the largest city in Texas and the fourth largest in the nation (City of Houston, 2026). Overall, the city is one of the most racially/ethnically diverse in the country – it is nearly 50% Hispanic/Latinx, 25% Black/African American, and 22% White. At the same time, it is "a bastion for income inequality" and highly segregated by race/ethnicity (Williams III et al. 2022, p. 458). It is also one of the world's most environmentally vulnerable urban areas (Chakraborty et al., 2019), resulting in a layered milieu ripe for explication via a CEJ lens.

Harvey hit in August 2017 and was the second most expensive storm to ever strike the United States. The Houston area received 52 inches of rain, the largest amount ever recorded from a single storm in the continental U.S. (FEMA, 2017), and some areas remained flooded for weeks. While the geographic extent of Harvey was massive – affecting almost the entire Gulf Coast of Texas and interior as far as San Antonio – the brunt of the storm was borne by the Houston area.

In the year after Harvey, almost 29,000 students in the Houston Independent School District (HISD) were homeless, and more than 15,000 (52%) of them lived, at least temporarily, in unsheltered places such as the street, cars, or abandoned buildings (Richards et al., 2024). Others lived in shelters (6%), in motels (6%), or doubled up with friends and family out of economic necessity (36%). Some of these students found housing, but homelessness remained 37% higher in the year after Harvey than in the year before. Moreover, almost all schools in HISD experienced some damage; some schools were closed for weeks while seven others were completely relocated for an entire school year (Waldron, 2017). As such, many students experienced the compounded loss of stability in both their homes and their schools.

Somewhat surprisingly, particularly to those familiar with storms such as Hurricane Katrina, students who became homeless due to Hurricane Harvey were fairly representative of HISD students as a whole (Cutter, 2006; Taneja et al., 2021), although they were slightly less likely to be White (7.0% vs. 10%) and more likely to be Hispanic (63% vs. 59%). While somewhat counterintuitive, this finding is consistent with the idea that Harvey was one of the most geographically dispersed storms in history, affecting not just the most flood prone areas, but also less risk-prone areas and more affluent areas along the city's famous bayous (Hunn et al., 2018).

It is important to acknowledge, however, the deep inequalities in the effects of Harvey on students experiencing homelessness. Indeed, nearly 7,000 students were already homeless before Harvey hit (Richards et al., 2024)—and the storm only created additional challenges to their housing instability. These students were particularly likely to be Hispanic and Black (Richards et al., 2024), highlighting the layered injustices in the hurricane's wake. Moreover, while most students who became homeless after Harvey had regained housing in the following year, Black students were particularly likely to remain homeless (Richards et al., 2024; Richards et al., in press).

The policy context also complicated storm recovery in the wake of Harvey. On the national level, when a natural disaster hits, FEMA is responsible for short-term supports such as minor home repairs, trailers for individuals and families who are rebuilding, and hotel rooms. Yet, in the wake of Harvey, Gov. Greg Abbott entrusted the Texas General Land Office with the responsibility to oversee the shorter-term supports, which required the state to quickly learn FEMA regulations and reimbursement processes (Formby, 2018). This posed substantial learning curves and contributed to delays in service (Housing for Harvey, 2019). Turnover at FEMA, challenges accessing data, and complicated application processes also slowed recovery (Formby, 2018).

## Participants and Data Collection

Part of a larger, mixed methods project on student homelessness in Houston, Texas, this study draws from 38 qualitative semi-structured interviews with school leaders, community providers, and parents living in a homeless shelter. While the focus of this paper is on Hurricane Harvey, all interviews were conducted between summer of 2021 and summer of 2022 during the COVID-19 pandemic. Typifying the long-term impact of natural disasters (Allen & Peñaloza, 2025), the city of Houston was still reeling from Hurricane Harvey when the pandemic began. As such, at the time of data collection, Houston was grappling with two crises: ongoing Harvey recovery efforts and the COVID-19 pandemic. We recognize this limitation, as we had to rely on participant recall; however, we were surprised by how well our participants separated their discussions of Harvey from the pandemic context. While many interviewees did sometimes compare the two crises in their responses, these comparisons added depth and richness to the participants' reflections on Harvey rather than detracting from them.

Nineteen interviews were with providers at community organizations (e.g., food banks, shelters, community centers) providing crucial anti-poverty support to those experiencing homelessness, specifically, or living in poverty, more broadly. While more information can be found in Table 1, these organizations provided five main areas of support: housing (temporary or longer-term), food, health, domestic violence prevention and services, and comprehensive support (broad range of services). To recruit community service providers, we used a community resource guide http://bit.ly/4q7nmCZ that was previously created by our research team in collaboration with the district. Using purposive criterion sampling (Ritchie et al., 2003), we emailed the person at each organization in the guide whose work was most relevant to homelessness. We also used snowball sampling to access additional data-rich participants. On average, community providers had over 23 years of lived experience in the Houston area, and all were in Houston during Harvey. Nine community providers identified as White, nine as Black/African American and one as "Other." These interviews were conducted virtually following best practices (Roberts et al., 2021).

We also virtually interviewed nine leaders tasked with addressing student homelessness in HISD including personnel in the Homeless Education Office (HEO) and

**Table 1** Demographics for participants (n = 37) by subgroup

**Anti-Poverty Community Providers (*n* = 19)**

| Pseudonym | Race | Hispanic/ Latine | Gender | Organization Type | Organization |
|---|---|---|---|---|---|
| Olive | White | No | Female | Community Center | Centerville |
| Anne B. | White | No | Female | Comprehensive Support | Reach-Horizons |
| Renee | White | No | Female | Comprehensive Support | Reach-Horizons |
| Heidi | White | No | Female | Crime Victim Support | VictimAid |
| Faith | Black/AA | No | Female | Daycenter | Safekeepers |
| Remi | Black/AA | No | Male | Daycenter | Lighthouse |
| Jessica | Black/AA | No | Female | Domestic Violence Prevention | Stop Domestic Abuse |
| Pat | Black/AA | No | Female | Domestic Violence Prevention | Domestic Violence Committee |
| Blanca | White | No | Male | Food | LifeChurch |
| Dion | Black/AA | No | Male | Health | AIDSCare |
| Gracie | White | No | Female | Health | StreetHealth |
| CeCe | Black/AA | No | Female | Housing | Safeways |
| Cleo | White | No | Female | Housing | Homebound |
| Elsa | Other** | No | Female | Housing | SOAR |
| Kaila | Black/AA | No | Female | Housing | Harborhaven |
| Maura | Black/AA | No | Female | Housing | Harborhaven |
| Nicole B. | Black/AA | No | Female | Housing | Sanctuary |
| Sara | White | Yes | Female | Housing | SOAR |
| Susan | White | Yes | Female | Housing | Harborhaven |

**School District Leaders (*n* = 9)***

| Pseudonym | Race | Hispanic/ Latine | Gender |
|---|---|---|---|
| Ana | Black/AA | Yes | Female |
| Ann | Black/AA | No | Female |
| Hanna | Black/AA | Yes | Female |
| Jay | Black/AA | No | Male |
| Lewis | Black/AA | No | Male |
| Luna | Other** | Yes | Female |
| Monica | Black/AA | No | Female |
| Nicole | Black/AA | No | Female |
| Thelma | White | No | Female |

**Parents (*n* = 10)**

| Pseudonym | Race | Hispanic/ Latine | Gender | Education | Children |
|---|---|---|---|---|---|
| Autumn | Black/AA | No | Female | Some college | 4 |
| Faith | Black/AA | No | Female | Some high school | 2 |
| Felicia | Black/AA | No | Female | High school degree | 3 |
| Mika | White | No | Female | High school degree | 1 |
| Natalie B | Black/AA | No | Female | Some college | 3 |
| Veronica | White | Yes | Female | Some college | 4 |
| Jamal | Black/AA | No | Male | High school degree | 1 |
| Jazz | Black/AA | No | Female | Some college | 2 |
| Sam | White | No | Female | Some college | 1 |
| Sheila | Black/AA | No | Female | High school degree | 4 |

*Note*. Each participant completed a short Qualtrics survey at the beginning of the interview to capture demographics. To protect confidentiality, all names of people (chosen by each participant) and organizations (chosen by researcher) are pseudonyms. AA = African American. School district departments (Homeless Education Office and Wraparound Services) at the individual level are withheld to protect confidentiality. *One educational leader (not in the table) was removed from the sample because they were not in the state during Harvey. **"Other" allowed a write-in option, which we do not disclose for confidentiality reasons.

Wraparound Services Department.[2] Both offices provide support for students experiencing homelessness including connecting families with community resources, providing public transportation fares, arranging for emergency temporary housing in local hotels/motels or shelters, and ensuring access to food (through food bags and pantries) and clothing (through clothes closets and district washing machines). Seven leaders identified as Black/African American, one as White and one as "Other." On average, educational leaders had 28 years of lived experience in Houston.

We also analyzed interviews of ten parents experiencing homelessness who were living in Houston during Harvey. While students experiencing homelessness may live in a variety of contexts (e.g., unsheltered, shelter, motel, and doubled up), at the time of the interview, these families were living in a congregate shelter. Three parents identified as White and seven as Black/African American; on average, they had nearly 20 years of lived experience in Houston. For logistical reasons related to technology accessibility during the COVID-19 pandemic, all parent interviews were conducted in-person and in compliance with shelter and IRB safety protocols. We also created a descriptive memo for each parent about their Harvey experiences. Across the project, we created over 50 memos. Table 1 provides demographic details on all interview participants by subgroup; all names and organizations are pseudonyms. Sample protocol questions by subgroup are in Table 2.

**Table 2** Sample protocol questions by subgroup

| Community Providers | HISD Staff | Families |
|---|---|---|
| **Background** | | |
| Tell me a bit about your own professional background. What led you to this role? | Tell me a bit about your own professional background. What led you to this role? | How long have you been in the Houston area? |
| In a typical week, what types of tasks, duties, and/or activities occupy most of your time at this school? | In a typical week, what types of tasks, duties, and/or activities occupy most of your time at this school? | |
| **Experience with Hurricane Harvey** | | |
| Were you living or working in the Houston area when Hurricane Harvey hit? | Were you living or working in the Houston area when Hurricane Harvey hit? | Where were you when Hurricane Harvey hit? |
| How has Hurricane Harvey impacted the city of Houston and the people who live here? | How has it impacted the city of Houston and its people? | What happened after Hurricane Harvey hit Houston for you? |
| In your opinion, how has Harvey shaped student and family homelessness? | How has Hurricane Harvey shaped student and family homelessness in Houston? | How did the hurricane impact you and your children? |

[2] Wraparound provided anti-poverty supports and worked closely with HEO.

**Table 3** Data analysis process example from interviews

| | | | | |
|---|---|---|---|---|
| **Raw Data Example** | "I know that a lot of people, probably two years later, you may even still be able to see blue tarps around here."<br><br>(Pat, Black community provider) | "It wasn't that their home flooded, the couch that they were couch surfing on flooded. Or they were under the bridge."<br><br>(Cleo, White community provider)<br><br>Team Memo: *viewed org as mostly serving families exp. chronic homelessness; expressed thanks org. had no damage and could prep.*remarked off recorder that the interview helped remind her why her org's work was "so important." | "Because so many people were impacted by Harvey, it brought a lot of awareness to homelessness… so, it brought that to light, and it helped bring more sympathy and empathy to their plight and awareness to what homelessness means and looks like–it could be anybody."<br><br>(Hanna, Black Latine district leader | "They have special teachers that come in… but they were flooded so they couldn't come in, or they had damage done to their houses, or something happened with their cars…some of them couldn't come in, so they lost money and he lost a tutor."<br><br>(Mika, White parent of one child) |
| **Initial Coding** | "Blue tarps" [in vivo code]<br><br>Still repairing [descriptive code] | "Couch… flooded;" "under bridge" [in vivo codes]<br><br>Chronic homeless [descriptive code]<br><br>Empathy [emotions code] | Awareness *[descriptive code]*<br>Impact of Harvey [*descriptive code*]<br>Empathy [*emotions code*] | Educational loss [*descriptive code*]<br>Special education [*descriptive code*]<br>Service disruption [*descriptive code*]<br>Economic loss [*descriptive code*]<br>Harvey damage [*descriptive code*] |
| **Connection to Lit. & Theory** | Recovery phase; procedural injustices | Environmental injustices; marginalization; procedural injustices | McKinney-Vento Act awareness | Harvey as Hazards (financial, educational, physical) intersectionality |
| **Helps to Support Finding** | Recovery phase was about rebuilding and repairing. Blue tarps, suggesting that repairs were not complete even years later, emerged as a symbol of the inequity. | Two subgroups of homelessness rose to prominence in the aftermath of Harvey: Harvey's homeless and chronic homeless. Chronic homeless were still impacted by Harvey but were often overlooked. | A silver lining of Harvey was that it brought more attention to student homelessness and increased sympathy. | Harvey emerged as a multi-pronged hazard that led to disruptions in education, as well as physical and financial losses. These hazards intersected with other factors, such as special education. |

## Data Analysis

All interviews were audio recorded, professionally transcribed, and uploaded into NVivo, a qualitative software program. Analysis began with initial coding, which required a line-by-line read of each transcript. Some code names were also in vivo, descriptive, and emotions codes (Saldaña, 2021). We clumped our initial codes to unearth emerging themes. Finally, as shown in Table 3, we connected our codes to key constructs from literature and theory. However, this was not a tightly deductive process as we did not wish to restrict our analysis. For instance, codes such as "ser-

vice disruptions" connected to the EJ concept of educational *hazards* and "special education" to the CEJ focus on *intersectionality* - the interplay between identities and structural inequities. Likewise, "blue tarps" were grouped with *recovery*, a prominent construct in the disaster literature.

### Trustworthiness & Positionality

Our full research team consisted of three faculty members across two universities and five graduate students – one of whom continued as a postdoctoral fellow upon graduation. Three team members identify as White, two as Black, two as Latine, and one as an ethnic and religious minority. While no one on our team was directly affected by Hurricane Harvey, several team members were residing in a nearby area that absorbed a substantial number of evacuees. Some of our team was already deeply engaged in our partnerships with HISD when Harvey hit, and as individuals, we were collecting supplies for evacuees, such as diapers and hygiene items. Our research team had wide-ranging relevant personal experiences as well, including working in and with urban public K-12 schools; volunteering with homeless and refugee shelters; confronting discrimination and racism; and hosting families experiencing homelessness in doubled-up arrangements.

To ensure trustworthiness in our study, our team engaged in several strategies. First, we met weekly to address any field issues in data collection. We also wrote reflexive and analytical memos and reflected on our positionalities, which assisted us in the rare instances where we faced inconsistencies in analyses. We recognized how our own racial and ethnic identities intersected and shaped data collection with our racially diverse participant groups, and how our identities and personal experiences also molded how we approached analysis. Furthermore, we triangulated our data across subgroups (community, district, parents) and data sources; for instance, memos and audio files allowed us to double check and deepen analysis. Finally, we engaged in member checking at various points in the project. Due to the pandemic, we created unlisted YouTube videos with commenting enabled, we met with shelter providers on Zoom to discuss preliminary findings and check accuracy, and we created fliers with key findings for families and district leaders that provided avenues for feedback.

## Findings

To examine how Hurricane Harvey shaped student homelessness, we drew insights from the literature to organize our findings across three phases of natural disaster: The *preparedness phase*, the *response phase* (immediate aftermath), and the *recovery phase*.

## Preparedness Phase

### Getting Ready for the Unknown

According to our semi-structured interviews, in advance of Harvey, many organizations had preparation plans in place based on prior hurricane experience. For instance, Susan, a housing provider, discussed designing their new building based on lessons learned from Hurricane Ike: "Inside our new facility, we do have our cafeteria area, which holds up to 400 individuals, has of course a generator, and we had a special glass that is encasing all that area, that is strong wind-resistant. Because it was so bad after Ike, we realized that it was much needed when we opened our new facility, we had our own shelter-in-place." Likewise, Cleo, a housing provider noted, "we did not have any damage…we were lucky enough to have prepared beforehand knowing the storm was coming." Cleo noted that they:

> spend a lot of time, days and days before any storm hits, knocking on doors and individually reaching out to the over 1,000 residents that we have to make sure that they are aware of the storm, because many don't have even smartphones, it's government-issued sort of flip phones. So they don't even get the news the way that we would get the news, by opening up our phone.

However, Ana, a district employee, cautioned that it was hard to precisely predict the degree of preparations needed. Nicole B., a housing provider, noted how they had to change course: At first, they were ensuring families have "lots of water, lots of non-perishable food, making sure each family has a lantern, each individual has a flashlight." Yet, "what started out as just our normal hurricane preparation quickly turned into…figuring out if we were going…to evacuate, thinking about sending folks to… our sister companies…if we get flooded, where are we going to have open beds?"

### Preparation as a Privilege

Not everyone had the ability to prepare. Ana, a district employee, for instance, explained how low-income communities were unable to stockpile food and other resources. These economic challenges were also exacerbated by the intersection of identities; for instance, older age and disabilities that impacted mobility shaped how realistic it was to evacuate. This made the preparation work of some non-profits, such as Homebound, which served people with disabilities, even more crucial. Others did not have the personal agency to evacuate; Sam, a young mother, who was still a teenager in foster care when Harvey hit remarked, "trying to convince my foster mom to evacuate, or do anything of that sort, was kind of like trying to pull our own teeth [out] with a toothpick–it's not going to work." The inability of some families and communities to prepare increased risks of homelessness, morbidity, mortality, and loss of valuable possessions.

## Response Phase

### Damage, Loss of Housing, and Separations

Harvey resulted in a dramatic loss of housing stock, and many families were displaced. Ann, a district employee, noted that "a lot of homes on the east side of Houston were destroyed. A lot of affordable housing, and so we still have families that are homeless as a result of that." Reflecting the intersection of race, the east side of Houston is predominately home to segregated Black and Latine communities. Renee, a community provider, highlighted how Harvey "increased need at the same time it depleted supply." Sometimes the destruction affected the entire neighborhood. Sara, a community provider who worked in housing, discussed her personal experience, "it was horrible…where I live was totally flooded, water all around, I was 10 days without being able to get out of my neighborhood. Everybody left but my family." Unfortunately, community provider Cleo noted that "it takes years to build an apartment building" and "decades to replace" lost housing. Ironically, spaces left abandoned by evacuees were points of attraction for others who had nowhere else to go: Faith, a community provider, described how some families moved into "deplorable" abandoned residences – the same ones that others had left behind when evacuating.

Most of the parents we interviewed encountered flooding. Sheila was living with family and could stay at her current residence during Harvey but did experience flooding. In contrast, Mika was residing in an apartment on the first floor and had "waist deep" flooding – "everything was gone." She was boated out to an elementary school where she stayed for four days before it was safe enough for her mother to come pick her up. She then moved in with her mother until she could get another apartment and start "over again, rebuilding." For Autumn, a mother with four children, "the storm hit very hard" and she "was out of power for two weeks" with water up to her "mid-thighs."

While some community providers and educational leaders had minimal damage to their personal property, others, like Sara, had a long road ahead of her to recovery after having to evacuate. Elsa, a housing provider, discussed how some staff had trouble getting to work due to destruction in their local neighborhoods. Others experienced damage to institutional buildings. For instance, one of the housing organization facilities, which had about 100 residents living in it "completely flooded," creating a "mad scramble." Likewise, Maura, who worked at a shelter, slept with the residents for five nights and six days and detailed her arduous tasks: She was "up all night, getting water out…during the day, providing activities for the children…continu[ing] to keep the ship running…1:00 in the morning…we would get up and go and squeegee the water out of the rooms." These challenges–personal and institutional–disrupted organizational capacity.

Some families also experienced physical separations. Felicia, a mother of three, had to evacuate a family party, via boat, to a library and stay for two days. However, one of her children was back at their apartment because he did not attend the party and she did not have time to get him. She noted, "so for two days just being separated from my children, it was my one child, it was just hard." Likewise, Jamal had water in his house up to his shins and had to remain physically separated from his daugh-

ter's mother: "we had the water coming into the house. Because I was with the kids, and of course my daughter's mother was at work, and she had to stay at her job the whole time Hurricane Harvey was going through."

### Educational Ramifications

Several participants noted how Harvey was also an educational hazard: from nearly 30,000 missing students (students who appeared on the rolls before Harvey, but were absent from them after the disaster; Richards et al., 2024), to closed and physically damaged schools, to difficulties providing vital educational services. As Lewis noted, the district "saw a significant number [of] students having to leave our district because they could no longer live in their neighborhood." Likewise, Mika noted that her teenage son did not return to the same school building because they "had to remodel the whole school." Additionally, according to educational leader Luna, Robin Elementary experienced two feet of water damage, interrupting school for students and requiring substantial repairs.

Beyond disruptions caused by school closures, there were also interruptions in services, which were particularly volatile for students receiving special educational services. Emphasizing how the intersection of housing instability and disability can produce additional inequities in disaster contexts and how the state can perpetuate or exacerbate inequities in the status quo, Mika's son temporarily lost access to his special education services he had a right to receive. Mika explained, "they have special teachers…but they were flooded so they couldn't come in, or they had damage done to their houses…their cars…some of them couldn't come in, so...he lost a tutor." Here, the teachers' personal damage to cars or houses hindered the organizational capacity of schools. Kaila, who at the time of the interview was a housing provider, was a special education teacher when Harvey hit. Kaila's class of six students suddenly became 15 during Harvey, making it challenging for her to meet everyone's needs. Students also experienced impacts at school beyond academics. For instance, Monica, a district leader, discussed how some students experienced bullying due to hygiene challenges caused by substandard housing.

### Donations and "Houston Strong"

Due to the amount of national media coverage on Harvey, and because other parts of the country were not directly affected, Houston welcomed an influx of donations and resources from around the country. Luna, a district leader, and Blanca, a food pantry provider, both noted that they were "flooded with resources," a theme likewise echoed by other community providers such as Elsa and Renee. Hanna, a district leader, discussed how schools played an important role in distributing resources.

Supported by the influx of resources, the city also embraced a unifying, "Houston Strong" mentality, with a "boots on the ground" ethos focused on helping one another. Reflecting this ethos, a key artifact, *The Housing for Harvey Action Report (2019)* discussed Houston's "undeniable sense of community and its tenacity to rise to the occasion" (p. 10) and the city's "'can do' spirit" (p.15). This mantra was mentioned by three parents (Faith, Autumn and Mika), five community providers (Dion,

Elsa, Gracie, Jessica, and Nicole B.), and two district leaders (Luna and Nicole). The phrase "Houston Strong" trended on Google two days after Hurricane Harvey struck, particularly in Houston and Cypress, a relatively affluent and racially diverse Houston suburb.

As a silver lining, because some families became homeless for the first time, and damage to housing was very visible, Hurricane Harvey also brought awareness to homelessness and recognized the need for non-profit services. For instance, Renee from Reach-Horizons, a comprehensive support organization, noted that Harvey led to people acknowledging:

> the need for our services more than ever. One, that our clients were so vulnerable and impacted in this situation, many who were displaced, but this also forced more people into homelessness and recognizing the greater need for our services…And so we were fortunate to receive some extra donations that we wouldn't normally receive.

Likewise, educational leader Luna noted that after Harvey, the storm effectively raised awareness about student homelessness. She noted:

> I think it shone the light of just how many of our students were already in those situations, and now you have this second trauma on top of that, of more insecurity. So, I think it made people ask questions, 'well, what is the homelessness really like in Houston, apart from a natural disaster?' so I think we started getting more attention…

Educational leader Hanna echoed the same sentiment: "because so many people were impacted by Harvey, it brought a lot of awareness to homelessness…it helped bring more sympathy and empathy to their plight and awareness to what homelessness means and looks like–it could be anybody." After the response period though, most providers, such as Gracie, highlighted how quickly the unity behind "Houston Strong" seemed to fizzle. Heidi, a community provider, felt that many people were focused more on their own family rather than helping others.

## Recovery Phase

### Unequal Distribution of Trauma

During the recovery phase, as community provider Jessica summarized, "Harvey was about repairing" and Houstonians were "focused on how to rebuild." Psychological impacts of the disaster became more evident. In the eyes of most participants in our study, the trauma was not evenly distributed and the path to recovery was not equitable.

Cece, a community provider, noted that it was traumatizing for families who needed to start over. She remarked that "that traumatic piece of it comes around every August [during storm season]." Indeed, several parents experiencing homelessness had pre-existing trauma from other natural disasters. For instance, Jamal experienced

a disruptive move from Louisiana to Houston due to a previous hurricane. Interestingly, three district employees declared that in the aftermath of Harvey, children would cry when it rained, due to anxiety and fear. For instance, Monica, a district employee, remarked that Hurricane Harvey was "also leading to mental health issues and trauma, when it rains in the classroom students sometimes are frightened, not sure if it will lead to another hurricane or an emergency evacuation."

Interestingly, there was some variation in how providers interpreted Harvey's impact on Houston communities. Olive, a community provider, recognized that Harvey had a broader impact than most storms, damaging neighborhoods across race and class. Jessica, a community provider and Lewis, a district leader felt that it impacted everybody "even if your area wasn't hit as hard." Most providers, however, noted that the recovery phase was a time where inequalities became more obvious, because the pace, access to resources, and starting points to recovery were quite different across communities. Monica, a district leader exclaimed, "in those economically disadvantaged neighborhoods, you still see the devastation, the lack of home repairs, versus some of our more affluent areas, they are up and running, vibrant, back to some sense of normalcy." Nicole B., a housing provider, pointed out that lower income families did not have renters' insurance. Representing distributive injustice, while the first floor is often the cheapest apartment to rent, it is also the first to flood. Educational leader Thelma proclaimed that unfortunately, "if you're on the first floor, you were toast."

Aid from FEMA allowed some families to repair their houses and return to the district. Yet other families did not receive enough recovery funds to restore their homes, or due to systemic and structural racism and other factors, were never homeowners in the first place. Cleo, a housing provider, noted it was "incredibly disproportionate." Blue tarps became a symbol of these disparities. Monica, an educational leader, noted how "homes still have blue tarps on them, so where they haven't received the financial support to fully recover from Hurricane Harvey." Pat, a community provider, likewise noted, "I know that a lot of people, probably two years later, you may even still be able to see blue tarps around here." Community provider Maura reflected, "working in the position that I work in, I still feel like some have not recovered since Harvey…and I know it's been some years, but it's not an easy thing for people to get back on their feet and get all the stuff back that they had before." More pithily, Jay, an educational leader, declared, "we all may be in the same storm, but we are not all in the same boat."

### Post-disaster Inequities Within Homelessness

As noted above, Harvey both created new homelessness and exacerbated previous homelessness. Distinctions between individuals and families who became homeless directly because of the storm and those who were homeless pre-storm became more prominent, spurred on by mandates from the Texas Education Agency - the state agency that oversees public education in Texas, FEMA regulations, and media portrayals.

On the one hand, there were families whose stints with homelessness could be traced directly to the storm. District leader Hanna declared that Harvey's homeless

"looked different but [were] still homeless." They often lost their homes but sometimes found it easier to recover than those who were homeless already before the storm hit. According to community provider Susan as well as district leader Monica, the rules, norms, and practices of the shelter were new to families who had not been homeless before, and some struggled to adjust to the loss of autonomy over food choices, daily schedules, and parenting decisions, hindering recovery. Furthermore, and as educational leader Luna explained, families who never experienced homelessness before were less likely to recognize that they qualified for McKinney-Vento-afforded educational support. Many of "Harvey's homeless" are "just shell-shocked, have no idea how to survive what's happening to them," according to community provider Gracie. While many of these families recovered quickly, others did not; for instance, Jazz, a mother with two children, lost her apartment due to Harvey, but was still living in a homeless shelter several years later.

However, families who were already homeless, commonly referred to as the "chronic homeless"[3] by participants in our study, had less access to recovery resources despite also being severely impacted by Harvey. As housing provider Cleo noted, for these individuals, "it wasn't that their home flooded, the couch that they were couch surfing on flooded. Or they were under the bridge." Anne B. suggested that "one of the issues with Harvey was clearing out the [large storm shelter]," something that providers were instructed to do so that the building could be used for a convention (Housing for Harvey, 2019). She noted that "people who were chronically homeless" were placed in a repurposed shelter building while "people who are not necessarily chronically homeless, we put them into rapid rehousing projects," which provide short-term housing to facilitate a quicker exit from less stable housing options. However, if they were not housed before Harvey, community provider Gracie exclaimed that they ended up "marginalized within the [disaster] shelters themselves" after Harvey hit. She explained that at the main congregate Harvey shelter, people who "had not been domiciled before" were "denied certain services" and that many of the supports offered "were offered [only] for people who lost their house and their housing." From Gracie's perspective, however, this happens "even at the national level" and while she was "not sure that that's intentional," it "is the reality and that has always been the reality every time we've had a disaster."

## Discussion

Our findings unearthed procedural injustices in the preparation and recovery stages of disaster. We found that Harvey's impact on student homelessness began even before the hurricane landed; the *preparedness phase* contributed to new and extended stints of homelessness as the ability to prepare before Hurricane Harvey was a privilege not available to everyone. While some organizations and providers, especially

[3] Chronic homelessness has an official U.S. Department of Housing and Urban Development (HUD) definition (https://www.hudexchange.info/homelessness-assistance/coc-esg-virtual-binders/coc-esg-homeless-eligibility/definition-of-chronic-homelessness/), but participants used it more loosely to refer specifically to families who became homeless before Harvey—and were still homeless during Harvey recovery. Some of these families may not meet the official definition of "chronic."

well-funded ones, had prepped, many individuals and families did not have the spare resources (e.g., money, time) or physical capacity (e.g., mobility, health) to prepare or evacuate.

Once the hurricane hit, the city lost a substantial amount of its affordable housing, displacing many families. In this *response phase*, the city received an influx of donations from around the country. A "Houston Strong" mentality emerged, which appeared to be equalizing. As some families became homeless for the first time, there was increased awareness and empathy towards the plight of students and families experiencing homelessness and the importance of non-academic school supports, such as wraparound services. Yet, after the initial shock wore off, the *recovery phase* epitomized vastly different themes, unearthing glaring inequities. Families and communities were attempting to rebuild but were only able to do so at different paces, with access to uneven resources, and from dramatically distinct starting points.

Currently in the U.S., environmental justice is under attack. The Environmental Protection Agency (EPA, 2025) responded to President Trump's executive order, "Ending Radical and Wasteful Government DEI Programs and Preferences," by placing employees in Diversity, Equity, Inclusion and Accessibility and Environmental Justice on administrative leave. Likewise, Trump repealed Clinton's EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," which mandated all government agencies to incorporate environmental justice aims into their mission (McCall et al., 2025). It is within this political context that we situate our findings.

### Implications for Environmental Justice

Drawing on insights from EJ, our study highlights how Hurricane Harvey was a multipronged hazard (Mohai et al., 2009). Hurricane Harvey had physical, financial, psychological, and educational impacts on Houston. For instance, substantial housing was destroyed, repairs were expensive, children cried when it rained, schools were closed, and educational services were interrupted. Distributive injustices, including inequitable exposure to natural disaster hazards, were evident. For instance, first floor apartments were cheaper and more likely to flood, and the east side of Houston, predominantly composed of low-income Black and Latine communities, lost a substantial proportion of their local affordable housing, making it even more difficult to find stable housing.

However, compared to natural disasters such as Hurricane Katrina, Harvey caused relatively more damage in well-off communities (Richards et al., 2024). For instance, our quantitative analyses of school district data suggest that "Harvey's homeless" were more demographically similar to students who were never homeless than they were to students who became homeless for reasons other than Harvey (Richards et al., in press). From this perspective, distributive justice, the traditional focus of EJ research (Pellow, 2018), does not fully capture the complexity of Harvey, which impacted broad geographic swaths.

However, our qualitative results suggest that there was great variation in both the preparation for and recovery from disaster within the Houston area, which shaped the student and family homelessness terrain. In other words, when we approach stu-

dent homelessness from a CEJ lens and consider the various phases of disaster from preparedness to recovery, the procedural injustices – how people experience oppression – are striking (see Pellow, 2018). While homelessness is an experience, and not an identity, our work makes initial inroads in showing how the overlap of housing insecurity with other factors, such as disability, can produce additional inequality in natural disaster contexts. For instance, some groups may be less able to prepare for or evacuate from a disaster, such as Homebound residents who had economic and mobility challenges, or may face more consequential impacts from educational disruptions, such as Mika's son who had special educational needs. Future research should purposively foreground the interplay between race and other identities with student homelessness across all phases of natural disasters.

### Procedural Injustices Within Homelessness

In connection to CEJ, our findings also unearthed concerning procedural injustices within homelessness (i.e., between the treatment of "Harvey's homeless" as compared to those whose experiences with homelessness predated the storm – e.g., "chronic homeless."). This concern, as Gracie pointed out, may be much bigger than Houston. While Gracie was "not sure that that's intentional," the issue could likely be shaped by a combined influence of lack of awareness and planning, stigmatization, discrimination, and systemic racism (USICH, 2023; National Homeless Law Center [NHLC], 2017). Advocates have argued that during crises, the marginalization of people who were already homeless before the disaster is a nationwide issue (Kenion, 2024; NHLC, 2017).

Reflecting how the state and institutions can perpetuate the status quo (Pellow, 2018), government and advocacy reports suggest that the inequities occur in the planning, response, and recovery disaster phases. Initially, at the state and local level, people experiencing homelessness are often overlooked in disaster planning, communication, and outreach (NHLC, 2017; U.S. Housing and Urban Development [HUD], 2025; USICH, 2023). Then, during disasters, some families experiencing homelessness who arrive at disaster shelters may confront discrimination and unique barriers not experienced by other evacuees (NHLC, 2017; USICH, 2023). According to AP reports, families who had to evacuate a homeless shelter due to Irma arrived at a disaster shelter only to be segregated from the other evacuees and given yellow wristbands (Dearen & Kennedy, 2017). Advocates have also suggested that in the aftermath of Irma some people with pre-existing homelessness were turned away from disaster shelters or not provided with basic needs like a cot, food, or medication refills.

In the Houston context, according to the National Law Center (2017), some people who experienced homelessness prior to Harvey reported that they were made to leave emergency shelters before other evacuees and, in contrast to Anne B.'s statements about post-storm arrangements, sometimes without plans in place. To the extent that this may have occurred, it would be especially concerning due to the criminalization of homelessness, including a Houston ordinance passed after Harvey that forbade camping in public spaces and required all belongings to be able to fit in a 3-ft cube (Kragie & Morris, 2017). The criminalization of homelessness can exacerbate

recovery by tainting rental applicants' background checks (NHLC, 2017) or forcing relocation to more vulnerable land, where they are at increased risk of additional environmental hazards and future disasters (USICH, 2023).

Furthermore, in the recovery phase, FEMA prioritizes those who were in housing prior to disaster (Henderson, 2017). Because families who were experiencing homelessness right before Harvey were generally not leaseholders or homeowners, they were largely ineligible for FEMA's Housing Assistance funds and Other Needs Assistance, which assists with a range of expenses such as cleaning supplies to dental and medical expenses. Both funding sources require proof of occupancy prior to the natural disaster (Henderson, 2017; Lin, 2018). However, Harvey caused these families substantial harm too. In fact, people previously experiencing homelessness, particularly from marginalized communities, typically confront *more risks* to their health and safety during natural disasters than those who had housing (USICH, 2023).

### Implications for Disaster Preparation

In the preparation phase, disaster plans and communications must consider people experiencing homelessness prior to the crisis too. Warnings and updates must reach people experiencing homelessness, even if they do not have consistent phone access or a physical address. Social media, radio, television, flyers in public places, and meetings (Substance Abuse and Mental Health Services Administration, 2024) can be used to not only notify families experiencing homelessness but also help quell distrust of authorities, concerns about legal issues, or worries about separations from family members, pets, or belongings (HUD, 2025).

State and local communities should integrate schools in designing outreach and disaster plans that consider the unique evacuation and transportation needs that prior homelessness may create—and plans should be tailored to the heterogeneity of student and family homelessness. In other words, a family with a car may need help with gasoline expenses or notifications about the evacuation route via the roads; an unsheltered family may need help getting to a safer evacuation point; families already in shelters may need assistance securing medication refills (HUD, 2025).

School districts may have valuable expertise and knowledge about the families experiencing homelessness that they serve, and schools are often a hub for safety and security during disaster (Mutch, 2015). We also encourage schools, when creating emergency operation plans, to consider FEMA guidance and resources, and apply, if eligible (through state or local/tribal agency) for FEMA's public assistance program to aid in emergency preparation (U.S. DOE, n.d.; USICH, 2023).

### Implications for Response & Recovery

In the response and recovery phases, discrimination should not be tolerated. Disaster shelters should be prepared to meet the needs of all evacuees, with appropriately trained staff, irrespective of whether they evacuated from a house, homeless shelter, or tent (HUD, 2025). Regarding recovery, when families are already in disaster shelters may be an opportune time to assist families in understanding their educational rights (including McKinney-Vento as well as relevant state laws) and provide them

with additional housing and educational support. Families who were homeless prior to the storm should be allowed to remain in disaster shelters longer, even as other evacuees may no longer need the services (HUD, 2025). Our findings also promote broad access to FEMA; particularly with safeguards in place so FEMA programs can reduce rather than exacerbate housing crises (Grube, 2024). Programs such as rapid rehousing can increase the number of leaseholders and, thereby, the number of families eligible for FEMA's transitional lodging assistance when the next disaster hits.

### Implications for McKinney-Vento & Education Policy

Our research also connects two overlapping bodies of literature that are often separated artificially: student homelessness (e.g., Hallett et al., 2025; Miller, 2011) and natural disasters (e.g., Lai et al., 2019; Mutch, 2015). Nearly all students who are displaced from a natural disaster qualify as homeless under the McKinney-Vento Homeless Assistance Act – with exceptions for students who may, for instance, be able to stay at their summer home. As such, scholars who study–or journalists who report on– the impacts of disaster on students and families should not shy away from the word "homeless" in favor of the more sanitized "displaced" language. Using the term homeless, which aligns with eligibility for McKiney-Vento, is critical to ensuring that students are connected to the supports which they deserve. And from a policy perspective, McKinney-Vento should make clear mention of natural disasters and the overlap to reduce misconceptions and artificial barriers to providing support. This is not to say that scholars and policymakers should overlook heterogeneity – not all children and youth experience homelessness the same way (see Pavlakis, 2017; Richards & Pavlakis, 2022). Recognizing that not all students can prepare for disasters to the same extent, or recover at the same speed, students may also need different types or intensity of supports. However, we should not use terminology that, at its core, situates some groups as more "worthy" of aid than others by placing them outside or "above" homelessness (see Pavlakis, 2020).

Hurricane Katrina played an important role in spreading awareness about the rights of students experiencing homelessness to immediate enrollment in school (Pavlakis & Duffield 2017). Our findings suggest that Hurricane Harvey also increased awareness and empathy about the plight of students and families experiencing homelessness. This is a particularly important side effect of disaster; identification and access to supports available through McKinney-Vento may be protective and reduce harmful educational impacts of housing instability (Pavlakis & Duffield, 2017; Richards et al., 2024). However, empathy has limitations; we encourage McKinney-Vento to be viewed as social justice legislation, rather than as an avenue for charitable work that can obscure the role of race and its interplay with class (see Aviles de Bradley, 2015a; Edwards, 2020). On the state level, Texas' "third choice law" even enables McKinney-Vento students to enroll in any Texas school district, irrespective of where they happen to be living. This state law, or others like it, may be a helpful tool in district efforts to retain students after crisis. According to an AP report, however, transportation is not mandated, which is a problematic barrier to effectively mobilizing this right (Melley & Ho, 2017).

## The Need for Action

We must acknowledge that our implications and recommendations come at a time of great political uncertainty, not just through anti-DEI initiatives that legalize the sidelining of race, gender, and disability, but also through recent actions by the state around climate change and environmental justice. In the aftermath of Hurricane Helene, President Trump has even proposed abolishing FEMA altogether (White House, 2025). While this would seemingly require Congressional action, if it was accomplished, the U.S. would not have a federal agency responsible for the various stages of disasters (Brown & Hardy, 2025; Moore, 2005). This would be particularly alarming because climate change makes natural disasters not only more likely, but also more volatile (Moore, 2005). As it is, FEMA is stretched thin: According to the GAO (2024), FEMA would require 35% more staff to be able to effectively respond to disasters.

In this political milieu, and aligned to CEJ, our work also highlights the imperative of ensuring schools are not simply a vehicle of the state but are engaged in grassroots action. We encourage anti-poverty advocates and community organizers to build coalitions within and across urban neighborhoods with shelters, schools, and various non-profits. For instance, aiming to reduce the privilege of preparation, cross-sector partnerships could create and deliver disaster preparedness kits and natural disaster preparedness training for families that are applicable to the contexts of housing instability and homelessness. Likewise, school leaders, who may be tasked with weathering the next storm (see Potter et al., 2021), may benefit from non-profit support in crisis management and trauma-informed training. In a world increasingly at risk of natural disasters due to climate change, and at a time of political uncertainty in the U.S., both pragmatic policy tweaks, as well as on-the-grounds solutions that depend less heavily on federal investment (Pellow, 2018), are much needed.

**Acknowledgements** The authors would also like to thank current and former graduate students for their contributions to this paper. Namely, Maria Jose Hernandez assisted in data collection in earlier phases of the project. Cheyenne Phillips provided project management support during analysis and writing. Shanea L. Neal and Shanae Neal contributed to informal discussions about analysis and writing during regular team meetings.

**Funding** Open access funding provided by SCELC, Statewide California Electronic Library Consortium. The research reported in this article was made possible in part by a grant from the Spencer Foundation (No. 202100012). The views expressed are those of the authors and do not necessarily reflect the views of the Spencer Foundation. Research was also supported in part by grants from the Moody Foundation, the American Institutes of Research, and the Southern Methodist University Research Council.

## Declarations

**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

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