



Environmental justice in disaster recovery: Recognition of the Latinx community by nonprofit leaders

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ABSTRACT

Nonprofit organizations are important sources of aid and assistance in the aftermath of disasters, directly contributing to disaster recovery efforts in communities and in some cases broader environmental justice objectives. However, there is a need to better align nonprofit organization processes and programs to address the needs of disadvantaged communities. This study examines how leaders of nonprofit organizations navigate and address the needs and experiences of Latinx persons in their community. We draw from 18 semi-structured interviews with leaders of nonprofit organizations involved in disaster recovery in Wilmington, North Carolina after Hurricane Florence in 2018. Interviews focused on the degree that nonprofit leaders involved in disaster recovery recognize the Latinx community, how the process of recognition manifests among these leaders, and how recognition by these leaders is related to procedural and distributional justice. Findings suggest that leaders adopt more sophisticated recognition of disaster recovery needs of the Latinx community when they have direct experience working with Latinx persons, collaborate with individuals who understand the Latinx community, partner with other organizations, or leverage geospatial or other data on disaster impacts and demographics. Data generated in this study underscores the role that recognition can play in promoting progress towards procedural and distributional justice in the disaster recovery context. These findings suggest that assigned leaders of nonprofits can and do function to exacerbate inequities through their disaster recovery services. However, the findings also showcase nonprofit leaders are interested in promoting just outcomes, and one possible route is through greater emphasis on the role of recognition. This work can inform approaches to resilience planning and help leaders of nonprofit organizations understand the needs and experiences of disadvantaged communities, so they can restructure organization policies and programs to address the needs of those who are most vulnerable to environmental hazards.

1. Introduction

Environmental justice can be useful frame for exploring inequities in the disaster recovery context. The concept of environmental justice is often used to describe the unequal experience of environmental harms and benefits for certain communities, typically racial minorities and low-income populations (Maung and Pellow, 2021; Schlosberg, 2003). Since Hurricane Katrina, the environmental justice frame has been increasingly used to highlight the disproportionate vulnerability to and impact of disasters on disadvantaged

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populations. For example, research underscores that disadvantaged populations are more exposed to natural hazards, more likely experience greater damage as a result of those hazards, and more likely to take longer to recover than non-disadvantaged populations (Bolin and Kurtz, 2018; Chakraborty et al., 2019; Hino and Nance, 2021).

Environmental justice can be conceptualized through three components. One of these components is *distributional justice*, equitable (fair and balanced) distribution of environmental benefits and harms (Schlosberg, 2003). Another component is *procedural justice*, fairness in the policy- and decision-making processes (Gould, 1996; Schlosberg, 2003; Young, 1990). *Recognition*, the focus of this paper, is the acknowledgement, respect, and legitimization of group difference (Fraser, 2000; Schlosberg, 2003; Young, 1990). Existing work notes progress towards justice in any one of these dimensions can promote progress towards justice in the other dimensions (Hourdequin, 2019; Schlosberg, 2003; Schlosberg and Carruthers, 2010). Recognition specifically has been cited as a pre-condition for distributional justice and a necessary component of addressing existing injustices (Fraser, 2000; Schlosberg, 2003; Young, 1990). That is, environmental inequities can't be remedied until those who have power to employ remediation are aware that inequities exist, who they exist for, and why they exist. Despite its apparent importance, recognition is the least understood dimension among the three justice dimensions (Blue et al., 2021). And while research has explored recognition in some contexts, all which confirm its influential role in environmental justice (Barnhill-Dilling et al., 2020; Gibson-Wood and Wakefield, 2013; Guibrunet et al., 2021; Hourdequin, 2019; Martin et al., 2016; Schlosberg and Carruthers, 2010; Urkidi and Walter, 2011; Waitt and Harada, 2019; Walker and Day, 2012), there is currently limited research on the role of recognition in disaster-related environmental justice issues, although it has been advocated for (Allen, 2013).

Recognition is a process which requires an entity express difference and another to be receptive to difference (Honneth, 1992; Kompridis, 2014). Existing theoretical work on recognition has typically focused on the struggle for recognition (Kompridis, 2014), however an emphasis on *who is recognizing* disadvantaged groups is important. We argue more specifically that the role of assigned leaders, those with formal and hierarchical positions (Northouse, 2021), in recognizing disadvantaged groups demands attention. Assigned leaders are in positions to directly institutionalize environmental justice through policy and program implementation (Harrison, 2019). Their capacity to do that effectively hinges on, to some degree, their recognition of the disadvantaged groups they are or could be serving. Despite the potential role of assigned leaders influencing environmental justice, most research to date has focused on emergent leaders in environmental justice efforts, typically the roles of activists and community organizers (e.g., Baptista et al., 2022; Bullard and Johnson, 2009; Krauss and von Storch, 2012; London and Harrison, 2021; Pyles, 2017).

In the United States (U.S.), assigned leaders across sectors and at all levels are increasingly encouraged to integrate environmental justice into their policies and procedures to promote just disaster recovery outcomes and more equitably distribute hazard risk (see for example, The White House, 2021). Leaders of nonprofit organizations are one category of assigned leaders that warrant further consideration. Nonprofit leaders have access to institutional resources that can directly contribute to disaster recovery, are less restricted by bureaucratic procedures than government entities, and are in positions of authority to define organizational policies and direct disaster recovery programs (Jenkins et al., 2015; LeRoux and Sneed, 2006; Lu, 2015; Nicholson-Crotty, 2011).

As organizations, nonprofits are important sources of aid in the aftermath of disasters (Demiroz and Hu, 2014). These organizations contribute to a resilient environment, serving diverse roles for impacted communities including provision of food, shelter, health services, spiritual care, case management, home rebuilding and repair, debris removal and cleanup, and direct charitable assistance (Chandra and Acosta, 2009; Eller et al., 2018; Sledge and Thomas, 2019). Increasingly, they hold long-term roles in recovery processes focused on preparedness, mitigation, and resilience (Eller et al., 2018). Through these roles, nonprofit organizations are positioned to advance environmental justice objectives in communities where disasters occur (Rigolon and Gibson, 2021). To advance environmental justice, nonprofit leaders are important actors in the disaster recovery landscape who can recognize disadvantaged groups and use that recognition as a baseline to make decisions that promote procedural and distributional justice.

In the U.S., nonprofit organizations involved in disaster recovery vary in size and capacity (Chandrasekhar et al., 2021), and while there is no single monetary estimate of the value that nonprofits contribute nationally, large nonprofits (such as the federally chartered American Red Cross) often provide several millions of dollars in direct assistance per disaster. Nonprofit organizations are consistently credited by affected communities, government officials, and researchers as instrumental players that directly provide or supplement public sector services which help communities get back on their feet after devastating disaster events (Curmin and O'Hara, 2019; Eller et al., 2018; Fema, 2018). Despite the national reliance on nonprofit organizations for providing necessary disaster aid, some research points to possible procedural and distributional inequities by nonprofit organizations (Domingue, 2021), signaling unhealthy environments for those who are underserved by the organizations. For example, research has documented circumstances where post-disaster aid favors persons who are homeowners, White, nonpoor, easily accessible, and who do not have disabilities (Chopel et al., 2021; Griego et al., 2020; Medwinter, 2021; Sledge and Thomas, 2019). While this work documents distributional injustices, there are few empirical studies that describe why these injustices materialize in the aftermath of disasters. We believe that exploring how nonprofit leaders recognize (or fail to recognize) disadvantaged groups they serve can provide insight into factors that influence inequities associated with the provision of post-disaster aid, and ultimately contribute to environmental injustice in communities recovering from disasters.

Inequities in the nonprofit sector compound distributional inequities observed in federal government aid, which have been widely documented (Bolin and Kurtz, 2018; Domingue and Emrich, 2019; Emrich et al., 2020; Muñoz and Tate, 2016; Rivera et al., 2021; Vilá et al., 2022; Willison et al., 2019), as well as compound inequities resulting from structural racism and institutional failures that have and continue to impact disadvantaged communities' vulnerability to environmental harms (Brown et al., 2018; Domingue, 2021; Lee, 2021; Richter, 2018). As such, it's important to better understand why injustice manifests in the nonprofit context to unravel systems of oppression and nurture healthy environments that help individuals recover from disasters and limits their exposure to future hazards.

Of particular interest in this study are inequities faced by U.S. Hispanic and Latino populations, defined as "a person of Cuban,

Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race” (U.S. Census Bureau, 2021). Here, we adopt the gender-inclusive pan-ethnic term *Latinx* in place of Hispanic and Latino throughout this paper to communicate acknowledgement and respect of difference (Scharrón-del Río and Aja, 2020) while also acknowledging ongoing public deliberations about the use of the term Latinx (PEW Research Center, 2020b). The U.S. Latinx population is the second largest ethnic minority group in the U.S. (estimated 65 million) (U.S. Census Bureau, 2021). The foreign-born Latinx population in the U.S. is estimated to be 19.8 million, one of the fastest growing population groups in the U.S. (PEW Research Center, 2020a).

While research documenting inequities in the distribution of aid to Latinx communities is sparse, recent work points to its occurrence (García, 2021; Méndez et al., 2020; Sotolongo et al., 2021). Additionally, in post-disaster settings Latinx populations face various unique social, physical, and legal barriers to recovery that directly and indirectly limit their access to aid (Fussell et al., 2018). For example, language barriers may prevent Latinx communities from accessing important information about safety or available resources (Lewis et al., 2019; Peguero, 2006). Poor housing quality, segregation, and concentrated poverty (Denney et al., 2018; Iceland et al., 2002; Strully et al., 2021) also create direct barriers to recovery as these communities suffer more extensive damages, are less physically accessible to those providing recovery resources, and have less resources to support themselves and their neighbors in the aftermath of disasters. Legal status barriers, such as those faced by undocumented immigrants, directly block undocumented immigrants who are disaster survivors from accessing potentially lifesaving government-funded resources. Those same legal barriers can also influence undocumented immigrants with respect to their accessibility of non-government funded resources. This is because the stigma and fear of being an undocumented immigrant can prevent those individuals from asking or reaching out for those resources (Spialek et al., 2021). Even among documented immigrants in the U.S., anti-immigrant rhetoric against those from Latin America (Pulido, 2007) may influence the willingness of Latinx persons to ask for help (Lee, 2020). For Latinx persons living in the U.S. territory of Puerto Rico similar barriers exist, yet they manifest differently and at different scales given the distinct social-political context (Brown et al., 2018; Lloréns and Stanchich, 2019; Sotolongo et al., 2021). These barriers facing Latinx populations restrict procedural and distributional justice for this community, hindering their ability to recover from disasters and furthering their vulnerability to natural hazards and other environmental risks. Based on the environmental justice framework, to promote environmental justice for the Latinx community, these barriers would need to be, as a baseline, recognized by those involved in directing disaster recovery efforts.

Despite inequities and barriers facing the Latinx community, little is known about how nonprofit organizations can tackle these issues to optimize the procedural and distributional justice outcomes for Latinx communities impacted by disasters. Based on insights from the environmental justice framework, we focus on the role of recognition, described as essential for promoting distributional justice and addressing existing inequities (Fraser, 2000; Schlosberg, 2003; Young, 1990). The objective of this paper is to explore how leaders of nonprofit organizations, who are in positions of power to directly influence policy and processes of their organizations, recognize Latinx communities they're responsible for serving, and the influence this recognition (or lack of recognition) has on the other dimensions of environmental justice. To do this, we explore the following research questions:

- 1 To what degree do local nonprofit leaders involved in disaster recovery recognize the Latinx community?
- 2 How does the process of recognition of the Latinx community manifest among local nonprofit leaders involved in disaster recovery?
- 3 How is recognition of the Latinx community by local nonprofit leaders related to procedural and distributional justice?

2. Material and methods

To explore the role of recognition in disaster recovery, this study uses a qualitative approach to generate a rich dataset to answer this project's research questions. The first author carried out data collection associated with this paper. The Institutional Review Board at North Carolina State University in Raleigh, North Carolina (NC) approved this project (Protocol #16613).

2.1. Study site

Wilmington, NC, U.S. served at the study location. Wilmington is an economically diverse port-city in the southeast region of NC within New Hanover County. The population is predominantly White (73.5%) has a diverse and growing Latinx population (6%) and a significant Black population (20%). While there is no data available detailing the diversity within the Latinx population in Wilmington, NC, the city's Latinx population consists of individuals from significantly different ethnic, racial, class, and social backgrounds. Wilmington has a diverse network of nonprofit organizations that aim to support the local Latinx community (e.g., Latino Alliance, Latinos Unidos, Latinos en Wilmington, El Centro Latino, Latin American Business Council) and local events intended to foster community across the Latinx community, such as the yearly *El Festival Latino*. Some of the Latinx population in Wilmington are undocumented immigrants. While there is no city-specific data on the undocumented immigrant population, statewide data for NC from Migration Policy Institute (2018) estimate that there are nearly 300,000 undocumented people in North Carolina, predominantly from Mexico (58%), Honduras (8%), El Salvador (7%), and Guatemala (5%). The data also show that 43% of undocumented people do not speak English well or at all, and 69% are uninsured, heightening the vulnerability to natural hazards of this subset of the population. Additionally, legacies of racism, stemming from the 1898 Wilmington Massacre, a violent coup by white supremacists, remain prominent in Wilmington and undoubtedly influence the vulnerability of racial minorities in the city (Cecelski and Tyson, 2000).

The city of Wilmington experienced severe impacts following the record-breaking rainfall and flooding associated with Hurricane Florence in 2018 (National Weather Service, 2018). Wilmington has diverse nonprofit organizations, government organizations, and local businesses that serve the community and that were involved in disaster recovery. The city also has a network of local leaders that

are involved in Latinx community advocacy. These circumstances create a valuable opportunity to explore the role nonprofit leaders play in promoting recognition of the Latinx community, and how this contributes to just disaster recovery for that community.

2.2. Semi-Structured interviews

The semi-structured interview guide used in this study was informed by early engagement with members of the Wilmington Latinx community, the Latino Alliance, and El Centro Hispano at the University of North Carolina in Wilmington (UNC-W). The semi-structured interview was designed to understand the disaster recovery issues facing the Latinx community from the perspective of nonprofit leaders involved in recovery and the extent to which those organizations served the Latinx community. The finalized semi-structured interview guide contained ten open-ended questions which provided information about the (1) involvement of the organization in disaster recovery (2) extent to which the organization worked with Latinx populations (3) challenges facing the Wilmington Latinx population with respect to disaster recovery (4) capabilities, assets, and resources in the Latinx community that could be leveraged for recovery.

Purposive sampling was used to gain a diverse representation of community organizations involved in recovery activities in Wilmington. The sampling aim was to interview leaders from nonprofit organizations that varied in services provided and the degree to which they worked with the Latinx community. Organizations were identified using a publicly available list of New Hanover Disaster Coalition partners on their website. When deciding to reach out to specific organizations from the list of partners, the researcher considered (1) whether contact information was publicly accessible (2) whether the services provided by the organization, determined by exploring that organization's website, had been represented in the study.

To request participation in the study, organization representatives in assigned leader positions were emailed. The email contained the project description and request for an in-person or telephone interview. If respondents agreed to be interviewed, a date, time, format and (if applicable) place was mutually agreed upon. On the day of the interview, the researcher met or called respondents. As part of the informed consent process, the consent form was reviewed, respondents were asked if they agreed to be interviewed and audio recorded.

In some cases, respondents provided supplemental documents for the researcher to reference and contextualize interview discussion points. When this occurred, documents were scanned and stored with respondent materials.

2.3. Data analysis

All interview recordings were transcribed verbatim and uploaded to project file on NVivo Qualitative Data Analysis Software (NVivo). Data were analyzed using both "pen and paper" techniques and NVivo. To begin the thematic analysis process, the first author of this paper developed a preliminary codebook using open coding strategies to identify themes that emerged organically in the interviews (Corbin and Strauss, 2015; Williams and Moser, 2019). This process was completed with pen and paper, adding line-by-line codes in the margins of each interview transcript. It was also at this stage that the researcher determined when data saturation was reached and respondent recruitment could conclude (Fusch and Ness, 2015). Specifically, saturation occurred once the emergence of new meaningful codes per each additional interview diminished.

Axial coding was then implemented to organize themes within the preliminary codebook based on emergent themes and the environmental justice framework. Research colleagues reviewed the codebook which was revised further based on feedback. All interviews were coded based on the final codebook (Appendix A), and additional community materials, and documents provided by respondents, supplemented the interpretation of coded content. Following the coding of the full dataset, the researcher shifted her perspective to interpret the data as whole "meaningful undivided units" (Chenail, 2012), exploring connections and differences among the data. The meaningful units that guided the interpretation approach are directly aligned with the research questions of this paper. Throughout the analysis process, emerging findings were discussed with supervisors and through academic presentations. This process provided an opportunity to discuss coder bias, challenge interpretations, and provide alternative explanations.

2.4. Positionality and qualifications statement

The demographics and prior experience of the first author directly informed the research topic and chosen methods of this study. These same factors also undoubtedly influenced the data generated between the researcher and the research respondents. The first author identifies as a White Latinx educated woman who grew up in a nontraditional family setting in a rural town in Puerto Rico. She personally experienced severe hurricanes during her youth and witnessed what she retroactively interprets as community resilience. She also has an appreciation for Latinx culture that was part of her upbringing. Her experiences and values, which have led to a desire to work with communities like the ones she grew up with, have been a guiding force in her research. She has also been educated in the social sciences for eleven years at the time of writing this paper. During those eleven years, she has been trained to use diverse social science research methods. She prefers qualitative methods for their ability to generate rich and nuanced data and elucidate the complexity of social phenomena. Finally, she adopts the perspective that disasters, prompted by natural hazards, are man-made. As such, her inquiry broadly focuses on the ways that human decisions influence human vulnerability to natural hazards and the negative impacts that result. In the context of this work, she focuses on the role nonprofit leaders play in the Latinx experience of disasters.

2.5. Establishing trustworthiness

Several actions were taken throughout the research process to ensure the trustworthiness of the data (Guba, 1981; Nowell et al., 2017; Shenton, 2004). These actions are summarized in Table 3.1.

3. Results

To be included in this study, respondents had to represent a nonprofit organization that was involved in disaster recovery efforts in the city of Wilmington after Hurricane Florence. In total, 18 interviews were conducted with 19 leaders representing 17 local nonprofit organizations involved in disaster recovery in some capacity. All interviews were conducted primarily in English. Interviews lasted between 48 min and 93 min, with an average interview time of 62 min.

The organizations represented in the dataset varied in size and scope of services provided. To contextualize the results, summary information about the organizations the respondents represent are provided in Table 3.2. Specific details of size and nature of the organization are concealed to protect the anonymity of respondents.

Thematic analysis of data revealed the degrees to which leaders involved in disaster recovery recognize the Latinx community in Wilmington, NC (henceforth Latinx community), how those individuals come to realize that recognition, and the influence of that recognition on procedural and distributional justice. Together, these findings begin to render a picture of how nonprofit leaders can advance environmental justice in the disaster recovery context.

3.1. Recognition of the Latinx community

To answer the first research question, which explores the degree that nonprofit leaders involved in disaster recovery recognize the Latinx community, recognition was coded when respondents expressed awareness of group difference associated with the Latinx community. In the data, recognition emerged in the following categories: awareness of needs and preferences, geography, experiences, culture and values, and capacities associated with the Latinx community (Table 3.3). Within and between these categories, recognition was exhibited along a spectrum, some individuals displaying baseline levels of recognition, others more nuanced.

All respondents recognized that a need of the Latinx community was access to information in Spanish to address language barriers. We are considering the acknowledgment of need for Spanish translations a baseline level of recognition. That is, if the only thing individuals recognize about the Latinx community is the need to provide information translated in Spanish, they would be considered “low-recognition”.

Within the interviews, we observed variation in the degree to which information access needs were recognized among respondents. For example, 11 respondents discussed the need for translated communications. Specifically, some respondents noted a need for Spanish-speaking personnel who could communicate with Latinx clients seeking the organization’s services. Also noted was a need for using communication outlets that were preferred by the Latinx community, such as a specific radio station or church.

Notably, one respondent discussed diversity *within* the Latinx community regarding language needs. They highlighted that some individuals who identify as Latinx are primarily English speakers, some are primarily Spanish speakers, and others may have different language roots. This level of recognition, centered on language, was more nuanced than other respondents, and suggests a need to consider translations beyond Spanish:

A lot of them, they come from regions in Mexico for example, where Spanish is their second language. So they come from regions that are predominantly indigenous areas.

— Respondent 5, recognition of needs and preferences and culture and values.

Table 3.1
Actions taken to establish trustworthiness of data throughout research process.

Quality criterion	Phase of research process	Reported in	Means of establishing trustworthiness
Credibility	Research design	Section 2.2	Use of well-recognized research methods (semi-structured interviews)
	Data collection	Section 2.2	Development of familiarity of research community through engagements in community events and meetings related to the Latinx community and disaster recovery
	Data collection	Section 2.2	Triangulation via different types of respondents
	Data analysis	Section 2.3	Recurring meetings with supervisors centered on concept development and data interpretation
	Data analysis	Section 2.3	Peer scrutiny via the presentation of preliminary interpretations at academic and professional meetings
	Reporting	Section 2.4	Description of researcher background and qualifications
Transferability	Reporting	Section 3	Thick descriptions of phenomena under study via power quotes, proof quotes, and contextual details relevant to those quotes
	Reporting	Section 3.2	Boundaries of study conveyed by reporting contextual details about respondents
	Reporting	Section 2	Detailed description of research methods provided (to facilitate study replication)
	Reporting	Section 2.4	Admission of researcher’s beliefs and assumptions
	Reporting	Appendix A	Full codebook reported providing audit trail of theme abstraction
Dependability	Reporting	Section 2	Detailed description of research methods provided (to facilitate scrutiny of results)
Confirmability	Reporting	Section 2	Detailed description of research methods provided (to facilitate scrutiny of results)

Table 3.2
Respondent organization summary information.

Respondent #	Organization mission includes focus on Latinx community (Y/N)	Organization mission includes focus on justice (Y/N)	Organization mission includes focus on disaster recovery or resilience (Y/N)	Organization is a local branch of national or international organization? (Y/N)
Respondent 1	N	N	N	Y
Respondent 2	N	N	Y	N
Respondent 3	N	N	N	N
Respondent 4	N	N	N	Y
Respondent 5	Y	N	N	N
Respondent 6	N	N	Y	Y
Respondent 7	N	Y	N	Y
Respondent 8	N	N	N	Y
Respondent 9	N	N	N	N
Respondent 10	N	N	Y	N
Respondent 11	N	N	Y	Y
Respondent 12	N	N	Y	Y
Respondent 13	N	N	Y	N
Respondent 14	N	Y	Y	N
Respondent 15	N	N	Y	N
Respondent 16	N	N	Y	N
Respondent 17	Y	Y	N	N
Respondent 18	N	N	Y	N

Table 3.3
Categories of recognition of the Latinx community.

Recognition of Latinx community	Proof quote
<i>Needs and preferences</i>	As North Americans, we think we have the answer to everything. We don't even know the questions. But the people we're trying to help do. And what they need more than anything is a voice. They need to be heard and they'll have the ideas of what they need within their community. — Respondent 4
<i>Geography</i>	It's also perceived to be that there aren't as many Latinx folks in the Wilmington area. But part of that is because the neighborhoods aren't as concentrated. There are smaller pockets, you know, like mobile home neighborhoods where lower income Latinx folks are predominant, but they're very much off the beaten path. They're not located on major thoroughfares through downtown. So they're not as visibly located. But the other thing is that the majority of the Latinx population in the region live in neighboring or rural counties. — Respondent 16
<i>Experiences</i>	[Latinx persons] are victimized time and time again by greedy landlords. So even if they have damage, maybe it wasn't enough damage that really should have made them have to leave their home. But then they leave their home. — Respondent 2
<i>Culture and values</i>	Just knowing the differences, different cultures and the religion and the family dynamics and just being more aware of them. Not in a sense of like, they're so different. It's just being respectful of it. Like understanding, there's probably going to be two or three generations in a household. And that's a positive thing. That's not a 'oh my gosh, you still live with your mother.' It's we're here because we're unified... Like it's just that's the family dynamic and being understanding of that. — Respondent 18
<i>Capacities</i>	They're very self-reliant. And I know family is a big component within that community, family, and that sense of community. — Respondent 12

As illustrated by the quote, the respondent also recognized ethnic variation of the Latinx community in Wilmington. This recognition was complemented by an understanding of how these differences may also influence group ideologies within the Latinx community:

A lot of us, we come from countries, unfortunately, where governments that identify as socialist destroy our countries. So when we are here, a lot of us have these instinctive reactions against everything that could be related with socialism. So that's happening with Cubans, with Venezuela, with people from Central America. With people from Mexico and El Salvador right now it's very interesting. Because if you talk to them, a lot of them, they agree with their presidents and they are openly socialist. So it's a mix of situations. You can't make generalizations about the Latinx community because we come from different backgrounds with different experiences. — Respondent 5, recognition of culture and values and experiences

This quote illustrates acknowledgment of difference *within* the Latinx community, once again a more nuanced manifestation of recognition. This degree of recognition did not arise beyond this respondent, who also identifies as Latinx. Additionally, the respondent noted a tendency for others to generalize the Latinx community, “almost everyone refers to people who are undocumented” (Respondent 5). This emphasis on undocumented persons was evident in the data generated as part of this study.

Although no other respondent recognized difference in the ethnic and geographical backgrounds of the Latinx community, some indicated recognition of the current geographical circumstances of the Latinx community. Specifically, they discussed specific mobile home communities in or near Wilmington that were occupied primarily by the Latinx community. One respondent, who worked closely with Latinx community members living in mobile homes, expressed frustration when an organization responsible for communicating safety information failed to acknowledge the physical location of this disadvantaged community:

[They told us] “we have this flyer we’re trying to get out to low lying areas with the fire departments and we need interpreters to go out with them.” And I said, “send me the addresses.” Well, not a single one of them was a mobile home community. It was the wealthier areas. I was just like, “you don’t need interpreters there…” And they were like, “well, where are these people living?” I had to literally, on a map, mark and send it back to the [them] because they had no idea where their residents live. — Respondent 17, recognition of geography

Respondents also recognized trust and fear issues among the undocumented Latinx community. Most respondents specified that the lack of trust was directed towards government entities. This indicates recognition as it shows the respondents’ awareness of undocumented Latinx experiences in the community, specifically their interactions with government officials.

But then you’ve also got that barrier, of legal and illegal. We think we’re doing so good having FEMA come. Well FEMA has uniforms and badges and coats that say F-E-M-A on them. [The undocumented community] doesn’t know if they’re going to turn them into ICE or if they’re going to arrest them. Are they going to deport them? You know, are they going to take their children?

— Respondent 2, recognition of experiences.

Some respondents also recognized that this distrust towards or fear of government entities impacts how the undocumented Latinx community perceive and interact with other disaster recovery organizations or services regardless of government affiliation:

A lot of disaster relief work is government based or perceived to be government based. So people are not going to be so willing to access resources. — Respondent 11, recognition of needs

In some cases, respondents also recognized the unique capacities of the Latinx community, discussing features of the community that make them resilient and admirable community members:

I find that the [Latinx] students I work with… they’re more aware in so many ways, whether that be like how to treat land, or how to treat people, but they’re also very willing to listen. And that is not something that I find in the general population of college students today, to just sit and listen and learn. — Respondent 13, recognition of capacities

Overall study findings reveal that most nonprofit leaders recognize the Latinx community beyond the defined baseline (Spanish-language needs only). For example, respondents indicated recognition of specific recovery needs and preferences (language, communication, trust) and geographies of the Latinx community. However, the depth of that recognition varied among leaders. Some individuals exhibited more nuanced recognition of the Latinx community. These “higher recognition” respondents, for example, discussed detailed experiences of Latinx community members, culture and values of the Latinx community, and unique capacities of the Latinx community.

Table 3.4
Process through which recognition manifested among leaders.

Process through which recognition manifested among leaders	Proof quote
Professional and service interactions	We also have a few ethnic specific churches that primarily exist to help the first-generation immigrants who have a culture in a mother language and something other than English. — Respondent 4
Collaboration with high-recognition individuals	You find the community leader, right...So identifying them, not being afraid of just like going out and talking to them, because we're all people.
Partnerships with other organizations	— Respondent 18 I’m actually having [partnering organization leader] come speak with our staff very soon about the different [immigration] statuses
Using data and technology	— Respondent 6 We’ve added four health related questions to our intake form... And when we first added that, I was like, man, nobody’s going to want to tell us that. But very surprisingly, people really jumped at the opportunity to have, have a nurse call them back that could maybe help them navigate a little bit about what their concerns are, or questions they might have. — Respondent 14

3.2. Factors contributing to leader recognition

To answer the second research question, centered on the how nonprofit leaders come to recognize the Latinx community, analysis focused on actions leaders took that contributed to their recognition. Data reveals four pathways through which leaders came to recognize (to varying degrees) the Latinx community, including professional and service interactions, collaboration with high-recognition individuals, partnerships with other organizations, and using technology and data (Table 3.4).

One way that recognition manifested among respondents was through *professional and service interactions* with the Latinx community. Specifically, through respondents' formal roles in their organizations or through volunteer roles, they interacted with Latinx community and learned about the community through that process. For example:

But my personal interaction with the Latinx community goes back to 15 years when we moved here, and I volunteered with the literacy council and other groups teaching English and doing other things so that I could meet people. And most of the people that I met through those opportunities were members of the Latinx community and just kind of stayed in touch and that has just grown. — Respondent 17, recognition through professional and service interactions

Professional and service interactions were the most common way through which the respondents came to recognize the Latinx community. Complementing this finding, some respondents who indicated not knowing as much as they would like about the Latinx community, also noted that they did not have sufficient professional or service interactions with that community. Validating the interpretation of limited engagement, a respondent, who identifies as Latinx, discussed observing poor quality interactions between nonprofit organizations and the Latinx community:

I have been working with people who are helping my [Latinx community], nonprofit organizations. And one thing that I find really interesting is that these organizations, they want to help but they don't talk too much with people. When we go to communities to deliver, for example, boxes with food... They just choose a community and they just go there and they deliver the boxes. That's what we are doing. [Nonprofit organizations] don't talk a lot with people in the in those communities. And it's interesting because what you can find in that type of communities is really diverse realities.

— Respondent 5, recognition through professional and service interaction (negative case).

Some leaders who acknowledged their limited awareness of the Latinx community, manifested recognition by *collaborating with high-recognition individuals*. In these cases, the objective of collaboration was specifically about learning about the Latinx community (i. e., needs and preferences, geography, experiences, culture and values, capacities):

I have friends who are interpreters and who don't just interpret, but they also go out and work within the Latinx community, mobile home parks and such. And they may tell me, "Well, we need this. Do you know about that?"

— Respondent 7, recognition through collaboration with high-recognition individuals.

In a separate example, a respondent highlights how not having connections to high-recognition individuals hindered their organization's ability to understand the needs of the Latinx community.

As far as [our organization] was concerned and why this was so illuminating, was we get our information for the most part from the emergency managers in each of the municipalities. So if the emergency manager doesn't know that there's a community that has needs, then we don't know there's a community that has needs. And so part of what we've been trying to do since then is build inroads into those communities. — Respondent 7, recognition through collaboration with high-recognition individuals (negative case)

Leaders also enhanced their recognition of the Latinx community by *partnering with other organizations* involved in disaster recovery. Leaders sometimes reached out to other organizations with the specific purpose of increasing their awareness of the Latinx community in some way, but this was not always the case. For example, in one case, the opportunity to partner with an organization, and increase their recognition of the Latinx community as a result, was not initiated by the leader being interviewed. But because that leader was receptive to the opportunity to partner, they manifested greater recognition of the Latinx community as a result:

[Partnering organization] sent me an email saying "Hey, this is what we're doing. This is what we're seeing. Can we partner with you guys for [resources]? Because we're seeing the [Latinx] families are really just struggling to adequately provide [resources] for their family.

— Respondent 8, recognition through partnerships with other organizations.

The last way recognition of disadvantaged groups manifested among respondents was by *using technology and data*. Technologies discussed were primarily mapping software. One specific software discussed by a respondent was *MissionInsite* (ASC Technologies, 2022), a software program that helps churches understand the location and demographic characteristics of their community:

We also do demographics. And [MissionInsite] shows the number of people by ethnic group and by language that they speak. And it'll show whether the language is the only language they speak, or it'll let me know how they're assimilated in any way.

— Respondent 4, recognition by using technology and data.

Other data that promoted recognition included information collected as part of intake forms, registries, and surveys. With respect to data, it's important to note that depending on the strategies used to collect data, the respective data may be susceptible to biases. For example, the quality of data could be impacted by available organizational resources, which one respondent noted (Respondent 3). The

quality of the data is also dependent on the openness of disadvantaged groups to provide their personal information.

3.3. The role of recognition on procedural and distributional justice

To answer the third research question, exploring how nonprofit leader recognition of the Latinx community related to procedural and distributional justice, we coded instances when respondents discussed procedures and distribution practices that integrated awareness of the Latinx community. Evidence shows that recognition by nonprofit leaders can advance procedural and distributional justice in the disaster recovery context. The data revealed explicit instances when leader recognition influenced procedural justice, when recognition influenced distributional justice, and when recognition influenced both procedural and distributional justice (Table 3.5).

A simple example of the link between leader recognition and progress towards procedural and distributional justice include respondents who recognized language needs among the Latinx population made efforts to ensure that information and communications were translated to Spanish (i.e., procedural justice). Some organizations also hired Spanish-speaking employees to ensure that there would be an organizational representative available to assist Spanish-speaking clients (i.e., procedural justice). Both examples are an example of the way recognition (of language needs) influenced procedural justice, as Spanish-speaking clients now had a greater opportunity to have their needs heard by those making decisions about the distribution of resources and services.

Additionally, the following quote highlights how some who recognized trust and fear issues among a subset of the Latinx community, were able to implement strategies to better access that community. Specifically, they implemented more culturally appropriate practices for this community to voice their needs, advancing procedural justice.

Table 3.5
Recognition influence on other dimensions of justice.

Recognition influence on other dimensions of justice	Details of recognition exhibited by leader	Summary of influence on justice dimension (s)	Proof quote
Recognition influence on procedural justice	Leader recognized needs of family to achieve in a safe and healthy living environment	Organization expanded the eligibility of their home building program through their willingness to develop a new housing plan that accommodated a large family's needs	I always make sure that there's no more than two people and usually everybody has their own bedroom unless they're the same gender and they're very close in age, and they're not anywhere near being adult... But we actually have someone who is probably going to be applying and they've got... 13 people in their family. And... we've never built anything more than a five bedroom. So we're willing to do what they want in us. — Respondent 6
Recognition influence on distributional justice	Leader recognized needs of Latinx community through partnership with another organization	Organization formally established partnership to provide resources to the Latinx community	[Partnering organization] sent me an email saying "Hey, this is what we're doing. This is what we're seeing. Can we partner with you guys for [resources]? Because we're seeing the [Latinx] families are really just struggling to adequately provide [resources] for their family. — Respondent 8
Recognition influence on procedural and distributional justice	Leader recognized language accessibility needs which in turn helped them recognize resource needs	Organization implemented more appropriate practices to reach out to community (Spanish, informal, anonymous request for resources), and distributed resources they learned were needed	Some of it was going to those mobile home communities, for example, that are predominantly Latinx families, and just going door by door, and either knocking, trying knocking if nobody would come to the door, putting a sign on the door in Spanish and English that said... "if you have any needs, write it on this paper, we'll be back this afternoon to pick it up, and we'll bring those supplies for you tomorrow.
Recognition link failure	Leader recognized policy barriers hindering access to resources	This organization has policy requirements because of their federal funding that impeded the recognition link with other dimensions of justice	— Respondent 12 And so [organizations] were making an intentional effort to go into those communities to identify the need without requiring, you know, FEMA documentation and all that sort of stuff. And so, while we have not necessarily been as successful doing work in that community, I know that through the coalition there have been [successes]. — Respondent 10

I know through the coalition, there was an effort specifically to reach into some of the pockets of the Latinx community in our area, because of that fear of talking to FEMA... And so [organizations] were making an intentional effort to go into those communities to identify the need without requiring FEMA documentation and all that sort of stuff.

— Respondent 10, recognition influence on procedural justice.

Also pointing to the influence of recognition on procedural justice, several respondents indicated that their organizational policies were changed or reinterpreted, or new products were developed or offered, to account for acknowledged group need (i.e., recognition).

Respondents also provided evidence of the link between recognition and distributional justice. For example, a respondent who recognized the needs and geography of a subset of the Latinx community, directed resources to that community through a neighborhood adoption program (distributional justice):

We formed bilingual teams of people that would go out and adopt neighborhoods and go see them every evening with food supplies, supplies and food.

— Respondent 17, recognition influence on distributional justice.

Further, underscoring the interacting link between recognition, procedural, and distributional justice, the following quote highlights how by recognizing Latinx community needs and geography, a community organization was able to develop culturally sensitive methods through which to reach out to the Latinx community (procedural justice) and ultimately distribute resources to that community (distributional justice):

I think Florence was a big wakeup call in that regard that there were a lot of people that had the same level of devastation. But in the current political climate, they were afraid to come forward and ask for help. And so part of what we started doing was partnering with Latino churches and ones that served the Latinx community to see if we can meet with some of those families who had the same level of devastation. And then we issued them the same level of financial assistance.

— Respondent 12, recognition influence on procedural and distributional justice.

Most cases that illustrated progress towards distributional justice exhibited the interacting link between recognition, procedural justice, and distributional justice.

Understanding the physical locations of disadvantaged groups emerged as an important category of recognition for being able to promote distributional justice. If leaders didn't know where communities were physically located, resources couldn't reach those communities, resulting in distributional injustice. However, while respondents indicated that geospatial data was an important recognition baseline to access and provide resources to the disadvantaged community, more was necessary to promote distributional justice. For example, respondents discussed using appropriate channels through which to engage with the disadvantaged group, a culturally appropriate product, or updated policies that addressed the circumstances of disadvantaged groups as important to build progress towards distributional justice. These examples all require more nuanced recognition beyond geography.

Finally, we'd like to highlight that despite leader recognition, there are some barriers noted in the data that impeded the recognition, procedural justice, and recognition justice link. One barrier was limited financial flexibility. Some organizations were constrained by funding regulations, requiring for example, that beneficiaries of resources provide proof of citizenship. Limited access to resources also influenced an organization's ability to promote distributional justice. For example, one high-recognition respondent initially struggled to provide resources to the Latinx community through their organization because they lacked the resources in the first place:

I think having a connection to [organization] would have been more helpful because we were kind of spinning our wheels every day looking for donations of things.... and [our efforts] would have been much improved if we had just had support from the [organization]. Now that we do have that connection, I think it would be much better in the future when another hurricane or something happens. — Respondent 17, recognition link failure

While several respondents discussed broader organizational constraints, some indicated that other organizations could sometimes help fill gaps their organization couldn't address, restoring the link between recognition, procedural justice, and recognition justice.

4. Discussion

This study explored how assigned nonprofit leaders recognize the Latinx community and how that recognition ultimately influenced the capacity of organizations to address the needs of that community in ways that promoted environmental justice. This study is situated a community with access to diverse disaster recovery resources, providing a valuable context through which to explore this phenomenon. This study yielded three key findings, directly linked with the research questions, that can inform organizational approaches to promote environmental justice in a disaster recovery context. Key findings can help practitioners develop strategies to build awareness of environmental risks and experiences disadvantaged communities face, and appropriate approaches for addressing risks and corresponding impacts.

Key finding #1: Recognition of the Latinx community varies among nonprofit leaders. We found that nonprofit leaders exhibited varying degrees of recognition related to the needs and preferences, geography, experiences, culture and values, and capacities associated with the Latinx community. On one end of the spectrum, there was a baseline recognition of the need for Spanish language communication, an awareness that all respondents shared. On the other end of the spectrum, was a recognition of diversity *within* the Latinx community across different categories of recognition. Most respondents were situated between these two extremes. For respondents who had more

nuanced recognition of the Latinx community, they illuminated ways that baseline recognition of needs, such as Spanish language communications, would be an insufficient way through which to counter barriers to recovery.

Key Finding #2: There are diverse pathways through which nonprofit leaders come to recognize the Latinx community. We identified that leaders adopt more sophisticated recognition of the Latinx community through engagements with the community or trusted community sources, technology and data, and direct communications and partnerships with other assigned leaders who regularly work with Latinx populations. Professional or service interactions with the Latinx community (whether as volunteers, paid staff, or clients) was a dominant pathway through which leaders enhanced their recognition of the Latinx community. Despite this, some respondents indicated limited representation of the Latinx community in their organization, pointing to clear opportunities through which to widen opportunities for leader recognition in the study community. Existing research has highlighted the importance of engaging impacted communities in organizations to align organizational practices and priorities to the needs of impacted communities (Krings and Copic, 2021). In this study, we refine this idea by suggesting that the engagement of disadvantaged groups within an organization promotes leader recognition, which in turn, can have an impact on organizational policies and the way programs are structured and implemented.

Key finding #3: There is a link between leader recognition, procedural justice, and distributional justice. Data showed evidence that when nonprofit leaders recognized the Latinx community, they were able to foster alignment in organizational policies and practices to reflect that difference, promoting access to decision-making procedures (procedural justice) and recovery resources and services (distributional justice). This was exhibited through: changes to engagement strategies (e.g., Spanish flyers on doors), clarifying and changing residency status requirements to receive resources, offering Spanish-language communications delivered by trusted sources, and referring survivors to resources that best suited their needs and circumstances. When procedures for engaging the Latinx community were based in recognition, individuals from that community were better positioned to participate in recovery efforts. This key finding echoes scholarship that underscores the importance of acknowledging and legitimizing difference across and within Latinx communities to empower their meaningful participation in addressing environmental issues that have been historically dominated by White values, priorities, and concerns (Anguiano et al., 2012; Fingal, 2019; Gibson-Wood and Wakefield, 2013; Naiman et al., 2019; Pulido, 1996). Further, this key finding also supports scholarship that points to a mutually supportive role of the three environmental justice dimensions (Hourdequin, 2019; Schlosberg, 2003; Schlosberg and Carruthers, 2010). Results also yielded evidence that recognition was relatively rudimentary among many leaders, impacting the organizations capacity for procedural and distributional justice, and hindering just recovery outcomes for the Latinx community.

5. Conclusion

This study examined how nonprofit leaders navigate and address of the disaster recovery needs of Latinx residents. The results revealed that nonprofit leaders have varying degrees of recognition of the Latinx community, and that recognition is often influenced by a leader’s engagements with the Latinx community, collaborations and partnerships with others who recognize the Latinx community, and use of technology and data. An observed link between recognition, procedural justice, and distributional justice indicates that nonprofit leaders can and do function to exacerbate inequities in a disaster recovery context. However nonprofit leaders, through a variety of actions, can work to counter this. Throughout the data, we found that many respondents were seeking to promote just outcomes, and one possible route to build progress towards that aim is through a greater emphasis on the role of recognition.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

Appendix A. Codebook used to analyze Semi-Structured interview data

1_Leader Recognition of Latinx Community	Respondent statements that indicate recognition of the Latinx community
Justice	Respondent indicates awareness of what the Latinx community considers just outcomes for their population
Experiences	Respondent describes Latinx community experiences

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1_Leader Recognition of Latinx Community	Respondent statements that indicate recognition of the Latinx community
Identities	Respondent indicates intersectional understanding of the Latinx community identity
Needs preferences	Respondent makes a statement about Latinx individuals' needs and preferences as it relates to disaster recovery and resilience.
Root causes	Respondent makes statement about root causes (initiating, earliest, "deepest" cause) of vulnerability for the Latinx community
Culture values	Respondent is aware of Latinx culture or what is desirable and acceptable to individuals who identify as Latinx
Capacities	Respondent notes capacities unique to the Latinx community
Geography	Respondent is aware of physical location of Latinx community
2_Factors Contributing to Leader Recognition	Any factors that in part explain how the individual being interviewed came to recognize (to whatever degree) the Latinx community in Wilmington
Limited understanding	Respondent acknowledges they know little about the Latinx community
Interactions	Respondent indicates direct interactions with Latinx community
<i>Personal</i>	<i>Interactions based on personal relationships</i>
<i>Professional</i>	<i>Interactions based on professional engagements</i>
<i>Service</i>	<i>Interactions based on volunteer service engagements</i>
Collaboration	Respondent mentions collaboration with individuals who are part of the Latinx community or have trust with the Latinx community
Builds partnerships	Respondent partners with organizations and that partnership helps build awareness of the Latinx community
Technology data	Respondent indicates that they learned about the Latinx community by using technology or data
3_EJ Outcomes	Indication of the role of recognition in promoting procedural or distributional justice
Procedural justice	Respondent references organizational change that influences the ability for the Latinx community to participate in decision making or have their voices heard in matters that influence their recovery
Distributional justice	Respondent references organizational change that influences the distribution of resources or services to the Latinx community and that influence the community's recovery
Link failure	Respondent references a failure to translate recognition into procedural or distributional changes through their organization

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