Qualitative Sociology (2024) 47:465–492
https://doi.org/10.1007/s11133-024-09568-8

A Rapidly Changing Ecology of Aid: Accepting Help and Stigma in the Aftermath of Disaster

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Accepted: 7 May 2024 / Published online: 13 July 2024

Abstract

Drawing on the human ecology framework, which describes social structure as dynamic and social action as environmentally contingent, this article examines behavior and attitudes around accepting help after disaster. Through two years of longitudinal in-depth interviews with 59 households in one community whose homes flooded during Hurricane Harvey, this study describes perceived shifts in the help provided by local organizations, institutions, and the social networks of community members—or what we call the local ecology of aid. While flood victims experienced an immense, and seemingly universal, outpouring of support in the immediate aftermath of the storm, in the ensuing months they reported a sharp decrease in this interpersonal support. In the absence of a local ecology of aid marked by the universal provision of aid, concerns about stigmatization began to inform decisions about accepting help. Our findings have implications for ecological theorizing, for understanding stigma and help-seeking or accepting help, as well as for fostering community resilience—a growing concern given the expanding scope and intensity of climate-related disasters.

Keywords Aid · Disaster · Stigma · Ecology

Introduction

What makes someone more or less likely to accept aid during a time of crisis or extreme distress? This question is key for researchers who have documented individuals' and households' material needs in the context of changing aid policies (Edin and Lein 1997; Halpern-Meekin et al. 2015; Sherman 2006), how prevailing cultural attitudes shape behavior around accepting aid and help-seeking (Sherman

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2009, 2013), the interplay between policies and broader conceptualizations of deservingness (Katz 1989), and how organizations and social networks mediate help seeking and receiving (Aldrich 2012; Pescosolido 1992; Small 2009a, 2017). Existing work explains various help-seeking outcomes—whether or not individuals and households pursue entitlements or express needs to their social networks—as a product of structural barriers to obtaining aid (Halushka 2020; Kissane 2003), the stigma of receiving assistance (Stuber and Kronebusch 2004), and variation in trust and expectations of reciprocity (Raudenbush 2016; Torres 2019). In this article we use the case of disaster recovery to show how local ecological factors—and their changes over time—affect individuals' attitudes and behaviors around accepting and seeking help.

Specifically, we posit that accepting help is conditioned by the local *ecology of aid*. Drawing on the first Chicago School's human ecology framework (Abbott 2005; Hawley 1986; Liu and Emirbayer 2016; McKenzie 1924; Park 1936), we define the local ecology of aid as the interactions between disaster-affected households and their local social networks, community organizations, and local institutions that provide help. These local and interpersonal forms of aid influence individuals' sense of the appropriateness of accepting and seeking help.

Local aid is in many ways more fluid than government aid, growing and contracting in different ways and at different paces than state-provided universal or targeted programs and thus may have a more dynamic effect on how individuals make decisions about whether to accept help (Beggs et al. 1996). Put another way, as the availability of more informal, local, and interpersonal forms of aid changes, so too do perceptions of need and deservingness. Here we examine how temporality—a central component of the human ecology theoretical framework—is key for understanding post-disaster decisions around accepting help.

To demonstrate the necessity of examining the local ecology of aid over time, we present a case study of Friendswood, TX a middle-class suburb of Houston, where around one-third of the households flooded during Hurricane Harvey in 2017. Our data include longitudinal interviews with 59 flooded households that began immediately after the storm and continued for over two years, as well as ethnographic observations of the Friendswood community during recovery, local meetings and events related to the flood, and interviews with both city and federal officials.

Disasters reveal taken-for-granted aspects of the social order (Erikson 1976, 1994; Klinenberg 2002; Molotch 1970; Tierney 2007), and examinations of disasters have extended our understanding of the origins and politics of the welfare state and citizenship (Dauber 2005; Elliott 2017), stratification (Fothergill and Peek 2004; Howell and Elliott 2019; Raker 2023), and urban development (Freudenberg et al. 2009; Gotham and Greenberg 2014). Like this previous research, we treat Hurricane Harvey as an intervening event, allowing us to more easily view patterns of offering and accepting help in a middle-class community.

Disasters often lead to novel organizational- and individual-level responses (Dynes 1970), particularly when it comes to offering aid (Matthewman and Uekusa 2021; Quarantelli and Dynes 1977). Here we show how ecological theorizing accounts for these various outcomes and can itself be improved by examining how shocks are mechanisms of emergence and transformation within a given ecology

over time. Indeed, early articulations of the ecological perspective were keenly aware of how change could occur rapidly within an ecology (Cressey 1932; Zorbaugh 1929; see also Abbott 1997a). We argue that theorizing ecological change over time is necessary for understanding shifts in opinion about socially acceptable behaviors and, in this case, has key implications for post-disaster resiliency.

We find that residents of Friendswood who flooded during Harvey experienced an immense outpouring of support in the immediate aftermath of the storm. Flooded households found themselves overwhelmed by the amount of aid being offered. Offers of help were so ubiquitous that residents occasionally described them as overbearing. The seemingly universal nature and availability of aid—nearly everyone in the community was helping or being helped—made it more acceptable for respondents to both seek out and accept help, even if they described themselves as those who typically give, rather than receive, help. Indeed, despite professed dispositions against accepting help—because it clashed with general middle-classed conceptions of self-sufficiency—households in Friendswood accommodated the novel and seemingly universal offers of aid by both accepting and asking for help.

However, within just a few months, the ecology of aid shifted as flooded residents reported a steep drop off in offers of help from local organizations and interpersonal networks. This prompted changes in how flooded residents' thought about their own deservingness and the appropriateness of accepting aid for both themselves and their neighbors. In the absence of a local ecology of aid marked by the seemingly universal provision of help, concerns about stigmatization began to inform decisions about accepting help. As a result, households varied in the completeness of their recovery and long-term resilience was hampered since those still in need were less likely to receive or ask for help. In essence, changing ecological conditions fostered distinct patterns of accepting help, which, at times, contrasted with flooded residents' self-proclaimed dispositions toward giving rather than receiving aid.

By highlighting the significance of temporality and the local ecology of aid in conditioning the acceptance of help, we further develop multiple lines of inquiry. First, we build on studies of government policy to show how local aid that is seen as universal reduces stigmatization of receivers. Second, we reveal how examinations of stigma have tended to ignore temporality and the ways in which social judgments about aid, dependency, and deservingness can shift over relatively short periods of time. Third, middle-class households, by virtue of the resources that make them middle-class, are less often in need relative to working-class and poor households. While middle-class attitudes about government assistance are well-documented—with general aversions to being seen as in need (Lamont 2000)—less work has examined whether and how these attitudes manifest as behavior in response to informal support in times of need. Lastly, and relatedly, as climate change widens the impact of disasters, middle-class households are increasingly vulnerable and more will find themselves navigating post-disaster aid and recovery (Cutter and Finch 2008; Dietz et al. 2020; Elliott 2021; Klinenberg et al. 2020; Rhodes and Besbris 2022a, 2022b). Our findings therefore have important implications for understanding post-disaster help-seeking and accepting behaviors, resilience, and inequality.

Stigma, Aid, and Disasters

As a theoretical concept, stigma has been extremely useful in explaining when, how, and why certain groups engage in help-seeking and accepting behaviors, particularly in examinations of the poor (Goffman 1963; Link and Phelan 2001; Pescosolido and Martin 2015). In the U.S., poverty is a highly stigmatized characteristic (Katz 1989; Newman 1988). Indeed, being poor is broadly attributed to personal decisions and failings of character such that revealing material need can lead individuals seeking help to be viewed as lacking work ethic or morality (Fong et al. 2016; Lamont 2000; Rogers-Dillon 1995). As a result, programs aimed at mitigating poverty stigmatize those who qualify in various ways including marking them as distinct, placing restrictions on those who accept aid, and exercising various forms of social control on participants (Hughes 2019; Piven and Cloward 1971). Moreover, structural inequalities lead to certain demographic groups disproportionately experiencing need, and so means-tested aid programs often produce gendered and racialized notions of dependence (Fraser and Gordon 1994). In other words, aid programs also *create* associations between forms of need like joblessness, poverty, and disability and particularly demographic groups (Goldberg 2007). To avoid stigmatization, those in need may choose to endure significant material hardship and forgo pursuing formal entitlements (Sherman 2006). Interpersonally, they may also avoid seeking help if they perceive it as leading to overly burdensome expectations of reciprocity (Torres 2019). Furthermore, those in need may refuse to accept offered support if they believe the aid to be associated with poverty or charity or believe that accepting will create unwanted bonds to those who are giving (Fong et al. 2016; Kissane 2003; Nelson 2000).

While poverty and the types of aid associated with it are highly stigmatized, simply being in need of material assistance itself is not. In fact, when the conditions that create individual need are considered external or beyond the individual's control, aid is less stigmatized. Disasters, for example, create "victims," or those who are "morally blameless," for the losses they face (Dauber 2005, 395). Households affected by disasters less frequently have their needs associated with individual choices, instead the need is attributed to the disaster itself. This may be especially true in middle-class communities where residents are less likely to have other stigmatized identities, particularly when compared to residents of poorer communities (Cherry and Cherrys 1997). Indeed, prior work highlights that when disaster victims *are* associated with other stigmatized identities, they can be subject to stereotyping with consequences for the types of aid made available. Reid (2013) shows that disaster aid policies assume affected households have a normative middle-class family structure and, consequently, those in extended family households are made to wait longer for formal assistance. Aid providers also associate Black disaster victims with highly stigmatized Black welfare recipients (see Quadagno 1994), creating further procedural hassles and stigma for those in need. This racialized and "middle-classist" policy response prevents many who qualify from receiving disaster assistance and reveals how stigmatization takes

place within a broader socio-cultural environment and in response to intersecting individual identities that inform and affect who is marked as deserving.

While middle-class households affected by disaster may be viewed with sympathy and understood to be deserving, particular class-based identities—specifically conceptions of self-sufficiency and the association between receiving aid and poverty that are common among the middle-class (Lamont 2000; Sherman 2009)—may prevent them from reaching out to available sources of aid. Fothergill (2003, 2004), for example, found that White working- and middle-class women in households that were displaced after the 1997 Grand Forks flood accepted both government aid and informal aid from their social networks, but doing so challenged their identities as generous and independent and conflicted with what they perceived as community-level standards of self-sufficiency. This led many to engage in acts of reciprocity with those who offered help in order to avoid being associated with "the stigma of public dependency" (Fothergill 2004, 79). While middle-class disaster "victims" may be protected from stigmatization, they may also reject offered aid or refuse to seek it out if it conflicts with internalized class-based identities.

More generally, higher status groups may respond differently to experiences of negative stereotypes due to their understanding of their social position within society (Major and O'Brien 2005). This provides further warrant for examining how middle-class households who rarely find themselves in need of material assistance navigate post-disaster help-seeking and receiving. In examinations of non-poor individuals who have recently experienced sudden financial loss, being fired from a job, or foreclosure, scholars have found reticence to engage in any help-seeking behavior that is associated with poverty (Newman 1988; Owens 2015; Sherman 2013). This past work explains help-seeking and accepting behaviors as the outcome of prevailing attitudes and how these attitudes affect individual-level perceptions and conflicts over identity. What these studies are less attentive to is how the ecological conditions under which aid is available shape whether or not accepting help is deemed socially appropriate. Additionally, this past work rarely examines how processes of accepting help may be dynamic, changing over relatively short periods of time. It is possible that attitudes and behaviors shift as the ecological conditions under which aid is offered change.

What is clear from past research on aid policy and stigma is that when aid is available to an entire population—as opposed to only a subset of qualifying individuals—it is generally less stigmatized (Rainwater 1982). Universal programs create constituencies that advocate for them and as a result they tend to be more durable (Brooks and Manza 2008; Rothstein 1998). Broadly, means-tested welfare programs are viewed even by the poorest households as highly stigmatizing, and are frequently turned to only as a last resort (Edin and Lein 1997; Sherman 2006). Overall, the extant literature predicts that forms of aid which appear to be universal and inclusive, as well as those which recipients do not have to actively seek out, reduce perceptions of exclusion and stigmatization.

We extend this line of theorizing beyond the realm of state policy and into the local ecology of aid. In the aftermath of a disaster, even if a household receives federal aid through FEMA it is rarely enough for complete recovery (Aldrich 2012). As damage from climate-related disasters has increased, FEMA has been explicit that

it cannot fully fund recovery for individual households. Instead, it advocates for a "whole community" approach, highlighting the critical role of local networks and organizations in facilitating recovery and fostering community resilience (FEMA 2011). In other words, middle-class households affected by disaster face the choice of whether to accept the informal aid of local organizations, friends, family, and neighbors as they navigate the recovery process.

An Ecology of Aid

We show that understanding why and how any individual or household accepts help after a disaster requires a clearer elaboration of the conditions under which aid is available. To do so, we draw on a long-standing theoretical tradition in sociology (see Besbris and Khan 2017). The human ecology perspective stresses the relations among proximate actors, actors' relationships to their locations, and actors' interactions with each other (Liu and Emirbayer 2016; McKenzie 1924; Park 1936; Park and Burgess 1969 [1921]). Importantly, it also draws attention to temporality—ecologies have rhythms, phases, and turning points that determine action within them (Abbott 1997a, 2005). This is a key benefit of using ecological theorizing to understand post-disaster behavior since recent work has pointed out the dearth of research that tracks disaster recovery over time (Raker et al. 2023; Waters 2016).

Moreover, temporality is becoming a more central concept in sociological analyses writ large (Beckert and Suckert 2021; Tavory and Eliasoph 2013; see also Maines 1987; Zerubavel 2003), and in theorizing climate change more specifically (Tavory and Wagner-Pacifici 2022). The human ecology perspective is apt for understanding post-disaster activity since it assumes that social action is inseparable from the environment in which it occurs. It also emphasizes that, while there is a general tendency toward equilibrium or stasis where the interactions within a given ecology are routine and stable, in response to novel conditions action within an ecology is dynamic and changes to accommodate to these conditions (Abbott 1995, 1997b; Emirbayer 1997; Hawley 1986; Park and Burgess 1969 [1921]). Accommodation is a form of interaction within an ecology where actors adjust their behavior to fit generalized expectations of appropriate, role-based conduct (Hemes-Hayes 1987; Park and Miller 1921), and is one of the four main types of interaction discussed by Park and Burgess (1969 [1921]) that drives change in an ecological system.

We take this ecological dynamism as a key starting point for understanding behaviors around accepting help in the aftermath of disaster when crisis interrupts rote aspects of social structure and interaction. When individuals or groups are presented with novel circumstances—as they are when disaster strikes—their habitual responses are often unsuitable and they are more likely to draw cues about how to respond from their immediate environment (Daipha 2015). Indeed, past work has shown how novel forms of *giving* emerge post-disaster (Matthewman and Uekusa 2021; Rodriguez et al. 2006; Stallings and Quarantelli 1985). What this research indicates is that individuals' attitudes and behaviors are not necessarily stable or predetermined by their identifications as individuals who typically give rather than receive aid. Actions in the aftermath of a disruptive event will largely depend on

situational and contextual factors and the ecological perspective is especially effective for conceptualizing how dynamic social conditions influence the longer-term effects of disaster on communities because it inherently defines the consequences of disaster "as processes that unfold over time rather than as static outcomes" (Arcaya et al. 2020, 678; see also Rosen 2017).

Additionally, an ecological perspective points to social context as the locus and motivator of action, while identities are understood as fluid in response to interactions within an ecology. As Abbott (1995, 836) writes, "Previously-constituted actors enter interaction but have no ability to traverse the interaction inviolable." Interaction within a particular ecology is key for understanding why individuals choose particular lines of action. This is to say that an ecological perspective challenges individuals' claims that actions are due solely to some pre-existing or sedimented identity. Instead, the perspective highlights that context and timing also play crucial roles in producing individuals' actions, and actions may be counter to stated identities as an accommodating response to novel ecological conditions. In our case, flooded residents accept help (or choose not to) not because it is a type of behavior that aligns with their identities as middle-class people, but as a response to the ecological conditions within which aid is provided. An ecological perspective suggests that when the ecology of aid changes in character, so too should behaviors around accepting help.

Here, we conceptualize the local ecology of aid as the disaster-affected households in need of aid, the organizations and social network connections that provide aid, other community actors like the local government and non-flooded households, and relations and interactions between these various actors.[1] As the provision of aid within this local ecology changes, it can affect how individuals make decisions about whether to accept help.

To be clear, ecologies of aid are not simply the aggregate of help provided by victims' social networks. Past work has shown that denser networks with more social capital are important to individual and community recovery (Aldrich 2012; Aldrich and Meyer 2015; Elliott et al. 2010). More recent work has also illustrated that network connections and social capital are dynamic, changing over time and providing highly variable aid, in the aftermath of disaster (Haney 2018; Waters 2016). And while this work has become more nuanced in understanding the benefits and drawbacks of social network connections post-disaster (Fernandez et al. 2006), a focus solely on networks is limited. Research on post-disaster networks tends to abstract network connections away from the socio-cultural environment and local institutional context in which they exist, ultimately stripping them of their relational

[1] We intentionally use the word "community" to describe the spatial properties of a particular ecology of aid for multiple reasons. The first is that disasters cross political/municipal boundaries in terms of their effects. Second, official boundaries do not necessarily match with residents' perceptions of their own neighborhood, town, or city, meaning they may consider members of their community who are in need as lying outside officially designated boundaries. Third, community connotes a permeability that is essential to ecological theorizing–communities can be entered and exited by individuals while maintaining their overall character. Lastly, community connotes a level of connection such that interactions and aid provision are meaningful to residents and may plausibly impact their behavior.

content (Mukherji 2014; see also Chan 2009; Emirbayer and Goodwin 1994). Moreover, in research on help from social networks, aid provision and acceptance tend to be operationalized as static, point-in-time variables when they are, in fact, far more processual (Small 2009a).

An ecology of aid perspective includes network connections but situates them within a temporally dynamic community context. In the aftermath of a disaster, as offers of help within the local ecology of aid change over time, households may readily accept help at one point but not do so at a later point, even if they are still in need. We argue that this broader ecological view of the local post-disaster environment can more fully explain disaster victims' help-seeking attitudes and behaviors around accepting help as well as potential concomitant processes like the stigmatization of accepting aid. Specifically, we demonstrate that stigma around expressing need and accepting help is far more dynamic than predicted by past work. We find that status as a victim of disaster does reduce the likelihood that those in need will feel stigmatized, but not consistently over time.

One of our contributions, then, is to show that help-seeking attitudes and behaviors around accepting help are conditioned by the local ecology of aid. After a disaster, as prevailing local sentiments and the provision of aid change within an ecology, affected residents accommodate their behaviors to these local conditions. The perceived availability of interpersonal aid and the ways in which aid is offered determine how those affected by disaster accept help. These ecological conditions, however, are highly mutable over short periods of time.

Data and Methods

We collected longitudinal data over a period of two years in Friendswood, Texas, a largely White, middle-class suburb of around 40,000 residents located about 20 miles outside of downtown Houston.[2] During Hurricane Harvey, Clear Creek, which runs through the town, overran its banks and flooded thousands of homes. We focused our data collection efforts on four census tracts adjacent to Clear Creek, which are over 80 percent White and have median household incomes between about $63,000 and $82,000.

We used multiple strategies to gather a non-random sample of flooded households with maximum heterogeneity. Our research team began field visits to Friendswood in October of 2017, and we started interviewing respondents six weeks after the storm. Our recruitment efforts began by talking to neighbors and knocking on the doors of residents whose homes backed up to Clear Creek. From these initial respondents, we used snowball sampling to contact other neighbors whose homes flooded. To expand the range of our sample across pre-flood household finances, as well as to diversify the social networks we could learn about within the community

[2] Friendswood acts as a case that, through triangulation with existing literature, allows for novel propositions and forms the basis of what Pacewicz (2022) calls "constitutive arguments"—claims that are cross-context, analytically descriptive, and theoretically generative.

(see Small 2009b), we mailed letters to flooded homes in the census tracts adjacent to Clear Creek and recruited through a community Facebook group. Ultimately, we interviewed residents of 59 flooded households along with key respondents including City of Friendswood and FEMA officials, as well as several landlords and real estate agents in the flooded neighborhoods. We also conducted observations at city and community events related to flooding and flood recovery efforts.

As shown in Table 1, over 80 percent of our respondents are White, reflecting the demographic composition of Friendswood. Respondents range in age from 26-76 and the sample includes single adults, families with young children who recently purchased their first home, and older retirees who have lived in the neighborhood for many years. Over 70 percent of our respondents are currently married, but the sample includes single, divorced, and widowed residents. Nearly 20 percent of our respondents have an advanced degree, and over 90 percent have at least some college. The majority are working full or part time, while 20 percent are retired and 20 percent are not employed—most of whom self-identified as stay-at-home mothers. We categorize the vast majority of our respondents as middle-class based on their education, occupation, and income level, as well as their residence in the middle-class suburban community of Friendswood (see Pattillo-McCoy 1999,15). The majority of households in our sample owned their home at the time of the flood, only five households were renting. Flooding from Harvey in our respondents' homes ranged from three to 72 inches of water, with 80 percent of the sample flooding over 12 inches. Only about half of our respondents had flood insurance coverage when Harvey occurred, amplifying the need for aid among many flooded residents.[3]

The interviews focused on respondents' experiences during the storm, their household finances before the storm, their decision-making about whether to return to their flooded property, and the steps involved in either moving or repairing their home. We also discussed their estimated costs and actual spending on recovery, as well as their sources of institutional financial support (FEMA and insurance) and the support they received from the community and their social networks. We discussed the types of aid they received during recovery and the individuals or organizations who provided this help. We asked how receiving help affected their process of recovery, which forms of aid were most important, and how it felt to accept help. Finally, we asked about their financial well-being post-flood, how the flood and recovery effort impacted their social networks, and their perceptions of risk related to their home and community. Interviewers also recorded fieldnotes after every interview that included observations of the community. In particular, these fieldnotes focused on the state of repairs of the respondents' homes as well as surrounding homes, the changing levels of street traffic, and signs of community aid (e.g., volunteer groups or individuals engaging in recovery and repair efforts).

[3] While most homes directly on Clear Creek fall within the 100-year floodplain (defined as having a one percent chance of flooding in any given year), many homes near the creek fall outside the 100-year floodplain and residents were therefore not mandated to purchase flood insurance coverage (see Brody et al. 2013).

Table 1 Sample characteristics

Variable	Percent	Mean	Range	Median
Age		50.03	26 to 76	
Sex				
Male	23.73%			
Female	76.27%			
Race				
White	83.05%			
Hispanic/Latino	10.17%			
Black	0%			
Asian	0%			
Native Hawaiian	0%			
American Indian/Native	1.69%			
Other	5.08%			
Marital Status				
Single	13.56%			
Married	71.19%			
Divorced	6.78%			
Widowed	8.47%			
Number of Children		2.23	0 to 6	
No children	15.25%			
Income		$123,364	$10,000 to $750,000	$100,000
Education				
Less than high school	0%			
High school/GED	5.08%			
Certificate	5.08%			
Some college	23.73%			
Associates Degree	8.47%			
Bachelor's Degree	37.29%			
Professional Degree	18.64%			
Doctorate	1.69%			
Employment Status				
Working full time	42.37%			
Working part time	8.47%			
Self-employed	6.78%			
Not Employed	22.03%			
Retired	20.34%			
Monthly Cost Mortgage/Rent		$1081.25	$0 to $6000	$950
Ownership Status				
Own	91.53%			
Rent	8.47%			
Flood insurance coverage	52.54%			
Inches of flooding		31.46	3 to 72	

Over a period of two years following Hurricane Harvey we collected four waves of interviews. Starting six weeks after the storm we began our initial wave of interviews with 59 households. Of these, 38 households completed a first wave interview prior to January 2018 when most had not yet received insurance or FEMA assistance money yet. So we conducted a targeted second wave of interviews eight months after the flood with 28 of these 38 households to get updates on their financial circumstances. Following this second wave, we completed two additional waves of data collection in which we recontacted the full sample of 59 households for interviews. Around the one-year anniversary of the flood, from September to October of 2018, we conducted follow-up interviews with 47 of our original 59 households. Then, around the two-year anniversary of the flood, from July to October of 2019, we again contacted the full sample and interviewed 48 households. We conducted 3-4 interviews with 81% of the sample (N=48), 2 interviews with 7 households, and 1 interview with 4 households.

All interviews were transcribed verbatim, and we generated codes through a careful reading of transcripts to identify common themes, paired with codes based on the themes we explicitly asked respondents about in our interviews (Deterding and Waters 2021). We utilized an abductive analytic approach, putting the themes that emerged from the transcripts in conversation with the existing literature to generate an initial codebook (Tavory and Timmermans 2014). Specifically, we found that the rapid changes in attitudes around accepting help among affected residents were not well accounted for by past literature on post-disaster social networks, and we developed a series of codes to capture patterns around help-seeking and accepting attitudes and behaviors in order to examine this within our data.

The Site: Friendswood, Texas

In the immediate aftermath of Hurricane Harvey, schools in both the local districts serving Friendswood students operated as temporary shelters after the storm, providing refuge for families in classrooms that were freshly decorated for the start of the new school year. Once residents were able to return to their flooded properties, starting a few days after the storm, a massive outpouring of local support emerged as thousands of volunteers helped residents "muck out" their homes by removing soaked and ruined belongings, wet carpet, sheetrock, and insulation creating massive piles of debris in their front yards. This huge volunteer effort was visible for nearly three months, highlighted by the sheer number of cars parked in neighborhoods that usually had very little street parking.

Around 20 local churches organized volunteer efforts and donations that served not only their congregants but also many other community-members who flooded. Local middle and high school students also organized into groups to help their classmates whose homes flooded, and elementary school "classroom moms" gathered and delivered supplies like books, clothes, and meals for affected families. Civic organizations like the Rotary Club gathered donations to provide to affected families. The City of Friendswood similarly organized support for affected first-responders, and several churches ran donation centers, where volunteers took shifts organizing

donations coming in not only from local residents but also from people across the country. Flooded residents could come and receive donations ranging from cleaning supplies to toiletries, clothes and diapers, as well as some tools and building materials. Local churches also housed teams of volunteers from out-of-town, and some ran food pantries or provided hot meals in the weeks after the storm.

A local church donated their space in a building on Friendswood's main commercial road to serve as a temporary FEMA Disaster Recovery Center, where lines of affected residents waited to apply for federal assistance, particularly on weekends. The church ran its donation center next door so residents seeking FEMA assistance could also access basic necessities. However, the FEMA center closed after five months and by the New Year the outpouring of volunteer support that was so visible in the early weeks after the storm dissipated. In a matter of months, only piles of demolition and construction debris remained as visible indicators of the flood.

The Ecology of Aid in the Immediate Aftermath: Universal Aid

The Friendswood community responded to Hurricane Harvey with nearly overwhelming offers of support for flood-affected residents. In the days immediately following the storm there were so many volunteers parking in flooded neighborhoods to help "muck-out" homes, remove and sort through wet belongings, provide meals, and offer emotional support that one respondent told us that next time it flooded "traffic control" would be helpful. Charles and Barbara, a White, retired couple in their seventies, described the community efforts saying, "it was a tremendous groundswell of help, and very gratifying, among the neighborhoods, among the people. Like I said, there were too many people. There were too many helpers." Respondents described this intense outpouring of support in highly positive terms, viewing it as a reflection of the strength, quality, and character of their community.

Previous studies indicate that middle class victims of disaster are wary of, and unaccustomed to, accepting charity (Fothergill 2003, 2004). These sentiments were echoed by our respondents who generally characterized themselves as people who give, rather than receive, help. Tanya, a White, married, mother of one in her forties, told us, "we're used to being the ones who go out and help. We're not used to being the people who get help." Jan, a White, married, woman in her fifties, similarly said, "we would like to think of ourselves as self-sufficient, and we would rise above it, but…we don't have that kind of money to get back…[to] the same level." They struggled with a conflict between their "values" – referring to self-sufficiency – and "the need to have, to rely on others to help." This orientation is not surprising since assistance of various kinds is largely stigmatized in the U.S. and households in this middle-class community reported little experience receiving formal assistance before the storm (e.g., TANF, food stamps, reduced/free school lunches, etc.). Since accepting or seeking out help was not something residents indicated they would "normally" do, many expressed feeling reticent about accepting and asking for help, even when they had acute needs. However, flooded households accommodated their behaviors to the changing ecology of aid after Harvey which was marked by seemingly universal aid. Even though Jan told

us that "socially one of the hardest things about Harvey is learning how to accept graciously," she also described how aid in the community was different in the first few weeks after Harvey. "You knew the community kind of helped each other, but this was a different type of community assistance…You had waves of people coming in, helping, 'What can we do to help?' and then you were just so overwhelmed by the total strangers." In this context Jan and her husband did indeed accept offered help as well as ask for help from friends and family. The point is that self-proclaimed identities as self-sufficient givers were less directly related to accepting help than the perceived availability of aid itself when the ecology of aid was at its most robust.

Sarah, a White, married, mother of two in her forties, similarly described getting help as a "learning experience for us, and we are usually the ones that are giving the help. I've never ever been on the receiving end of the help. That was humbling, very humbling and I had to learn." Although accepting help was atypical for Sarah, her decisions around both asking for and accepting help were responsive to the local ecology of aid after the storm. Sarah described a large volunteer turnout in their neighborhood the first weekend after the storm. "Saturday we had more, more people in the neighborhood [asking] 'How can we help?' and strangers walking into your house and helping you muck it out." Given the abundant offers of support, Sarah accepted help from local volunteers. She told us that once they finished in her house, "a lot of 'em are going on to another house to help and they're just keeping the ball rolling." In other words, this aid was not targeted to Sarah's family but instead was broadly offered to everyone affected by the flood, and she knew others were accepting help as well. In this context Sarah also actively sought out help from her social network. In the days after Harvey she called some of her husband's coworkers to ask them to help muck out their home. She told us, "I called…and I had about a dozen guys show up here. So, we knocked out a huge majority of everything out of the house in a day, on Saturday. The big, heavy stuff came out, the sheetrock came out. They, I mean they rolled up their sleeves and they really cranked it out…those guys they came through for us."

In an ecology of aid dense with offers of help, the stigma of being in need was reduced and residents more readily asked for help. Samantha, a White, married mother of two in her thirties, told us that in the immediate aftermath of the storm, "people are constantly asking, 'What can I do to help? What can I do to help? What can I do to help?' And so I just decided that was one thing I had to, like, set my mind to, like okay, if I need help I'm going to ask for it." Andrea, a Hispanic, married mother in her thirties, similarly described how she, despite her proclaimed identity as self-sufficient, accommodated her behavior to the robust and free offers of help in her neighborhood after the storm. She told us that before Harvey,

> We wouldn't have really asked for help or anything. But that day that we were cleaning out the garage and looking at that and just going how are we going to clean out this entire garage…It was just so much…and when the girls from the high school that didn't flood were just walking around going 'Can we help?', I was like 'Yes,' and you know I would have never asked for that kind of help.

This highlights the ways in which flooded residents accommodated their behavior to accept help during the massive outpouring of support within the local ecology of aid, in spite of viewing themselves as those who typically give rather than receive.

The density of offered help played a key role in flooded residents' accommodation of local ecological conditions. Carrie, a White, married, mother of two in her thirties, said that volunteers just continued to show up at their home offering help in the first week after the storm. She accepted their help until they simply had more help than they needed. "A friend from church, his brother had a whole crew from another church...the more that came, it was just so much faster, so it was like, 'Yes, if they're free, yes I'll take them, but then if there is another house that doesn't have anybody then let them go there.' So that crew, they came day two of work and then [on] day three they went to a neighbor's house." Flooded residents like Carrie not only expressed little concern about accepting help in the context of this outpouring of support, but the sheer number of volunteers often meant that residents perceived the help as universal and easily transferable.

The ubiquity of perceived help giving and receiving also made it easier for households to take the help that was offered. Cora and Michael, a White, married couple with four children in their forties, explained, "we're not the people that would ever reach out" but in the aftermath of the storm, they accepted offers of help. Offers were so plentiful that they told us it felt like, "sometimes they would force themselves on you, and you didn't think that you wanted or needed it." In this ecology of aid, repeated offers of help pushed Cora and Michael towards accepting and they told us, "We took it." The scope of the volunteer effort in the first few weeks after Harvey meant that many never had to ask for help, instead there were frequent, proactive, and even forceful offers of help—a robust ecology of aid in which flooded residents did not express any fears of stigmatization for accepting help. Valencia, a single woman in her sixties who lives with her elderly father, told us, "I'm a giver... If I see somebody needing something, I'm gonna jump up and do it, just do it...If I see somebody needing help, everybody around will tell you I'll give them the shirt off my back." Valencia's conception of herself as a giver led her to initially decline several offers of help from volunteers in the neighborhood. However, some volunteers continued to press:

> They would come walking up and down the street, or driving up and down the street, and would just stop and ask, 'Do you need some help?' And half the time you could say, 'No, I don't think so.' And they go, 'Yes, you do.' And just come on and take over, which was a good thing because they could see that you didn't know where to go or what, what to do next. And they [would] just come in and sit and talk with you and figure out what needed to be done for you on some of the things you know, you couldn't figure out.

The dense ecology of aid—and a perception that seemingly everyone was accepting help—made it easier for residents like Valencia, Cora, and Michael to acknowledge their need and allow the volunteers to help. The shared sense among residents of Friendswood that the community as a whole was engaged in asking for, offering, and receiving help enabled flooded households to accept aid without fear of stigmatization or compromising their identities as independent or generous givers.

The Ecology of Aid Over Time: Offers of Help Fade & Stigma Emerges

While the first few weeks after the storm were marked by an overwhelming availability of aid, which made it socially acceptable to receive help, within a few months flood-affected residents report that offers of help began to fade and flooded households had to make decisions about whether or not to continue to accept help. In this changing context asking for and receiving help became stigmatizing.

Kara, a White, married mother of three in her forties, described how aid receded within three months of the storm even though the need remained:

> Starting Thanksgiving going forward it's, it's been, not the same...people have moved on even though we can't move on...In the immediate aftermath people just wanna do whatever it is to help. You know, you would have people show up at your house and just start cleaning out stuff for you. I had a friend who went to go help at a house and didn't realize until like five hours in that she was at the wrong house. You know, because it's just whoever wants to help, come in and do it. So the community was, has been, great in that way. But it fades. And it fades before you need it to fade.

Georgia and Lemming, a White, married couple in their late fifties, similarly noticed that the unprompted offers of help dissipated within a few months even though they, like many of their neighbors, were still in need. They described the change in help over time saying:

> It's been how many months now, four months? And so I think people are more back into their routines. That's not nice. And so it's just not forefront in people's thoughts anymore, you know. It's not an emergency anymore. And I think that was really when it, most of it, went. You know, when something happens, people immediately, with the empathy, want to go out and do something to help. And then eventually, life sort of catches up with people, and they get distracted again.

The robust outpouring of support was short-lived, and as time passed offers of help faded despite persistent need among flood-affected households.

As the ecology of aid changed and the community-level sense of cohesion faded, some respondents perceived a marked change in how they were treated. Alicia, a White, married woman in her sixties, told us that in "that first week or so…the second week, it was amazing what the people were doing." Her family had friends, members of the Friendswood baseball team, coworkers, extended family, and other community members all show up to help them immediately after the storm. "We had people volunteer from churches, and all these kinds of people were here and it was awesome. I mean, I could not say enough about the outreach of those people here locally." However, two years after the flood she told us that "I think the people that were not flooded are way over it." Alicia described the dynamic with friends whose homes did not flood, saying, "They're way past that now. You know, Harvey is kind of, like, ancient history." As the local ecology changed, residents like Alicia began to worry that they would be

stigmatized for continuing to ask for help. She told us, "I wouldn't talk about Harvey [to] anybody who hadn't flooded because they would be like, 'You're so living in the past.' You know. 'Quit moaning.'…You don't want to raise something that's pointless and stupid to them, and they will interpret it as, 'You're just not over it, are you?'" As time passed, the local ecology of aid began reverting to its pre-crisis equilibrium where middle-class households in Friendswood were expected to be self-sufficient and unprompted, universal offers of help were not the norm. Alicia reported, "for those houses that…still haven't been fixed there is a certain amount of, I think, impatience with the community, with the neighbors. Like, 'What are you going to do?' You know." Yet, for many residents, recovery was still ongoing. This disconnect meant flood-affected households started to be mindful of accepting help, making requests for help, and even of discussing the flood.

Those who were still navigating the slow process of repairs described experiencing more interactions that reflected this changing ecology. Karen, a White, married mother of three in her forties, was extremely grateful when friends loaned her family an RV to live in as they repaired their house. However, she described tensions emerging just three months after Harvey, as her friends became impatient with how long her repairs were taking. She told us, "the owners of the RV… they did put pressure on us I will say by Thanksgiving, they started asking when are you going to be out, we didn't know it was going to take this long. And we felt really bad." For Karen and others still in need, these types of interactions indicated that they were increasingly likely to face judgment about the pace of their recovery and any expression of ongoing need.

Even some households who flooded but finished rebuilding relatively quickly started to judge neighbors who were slower to repair their homes. In other words, as the local ecology of aid shifted and became less defined by universal offers of help, comparisons across affected households and their recovery became more pronounced. Charles and Barbara, a White, retired couple in their seventies, had flood insurance and enough savings to pay a contractor to start work even before their insurance payments began. As a result, they were one of the first households in our sample to complete repairs. A year after the storm, many of their neighbors remained much further behind in the repair process. They were still living in trailers in their driveways, and continued to have piles of construction debris in their yards from ongoing repair work. Although Charles and Barbara recognized that "a lot of people didn't have money and [when] they don't have money, it's a struggle," they felt frustrated with the slow pace of neighbors' repairs. Charles told us, "there comes a point in a subdivision where you're going to say 'Enough is enough, enough time has gone by, you got to get back to where we were.'" For Charles this meant, "there are certain standards that you got to meet, like getting these dang trailers out of here or getting your house fixed up...because that affects all of us...there must be ordinances or health and safety standards, at some point you say, 'Enough is enough.'" Charles' sentiments reflect the general erosion of community support, empathy, and aid that defined the ecology immediately after the flood.

The Stigma of Accepting Help: Those Still in Need Accommodate to Ecological Conditions

In this new local ecology defined by fewer offers of aid and more critical assessments of flood-affected households, we find that flooded households were more reluctant to accept offered help. Despite continued need, as time progressed households came to see accepting help and help-seeking as less appropriate and potentially stigmatizing, particularly since growing variation in repair progress allowed for comparison across flooded households. More broadly, an ecological theory of action dovetails with relational accounts that argue for collapsing distinctions between situation and agency (see Abbott 1997b; Emirbayer and Mische 1998). Flooded households who were still in need were not shifting their identities from those who give to those who are in need and back again. Instead, they adjusted their behaviors to perceived conditions under which help was available. The fact that aid became more stigmatized is linked to its seeming waning availability, and those still in need changed their help-seeking and accepting behaviors accordingly.

Over a year after the storm, Molly and her husband still had a few large repairs left – they still did not have a functioning bathroom. However, they found themselves in a different context. Unlike right after Harvey, where help was being offered consistently, now, if they wanted aid, they would have to seek it out. Molly told us that even within the changing ecology of aid she knew that she could still ask volunteers from her church to help her complete these repairs. However, she and her husband indicated that they would no longer ask for help. "We could contact them. I mean they could come and help with the shower. I mean that's still an option for us to do." Her husband replied, "I'd feel guilty about using them for that." Although they had accepted this type of aid in the immediate aftermath of the storm, the expressed anxiety and guilt reveal that Molly and her husband believed there was *now* something wrong with accepting the type of aid they had accepted just months prior, and the couple tied this change in attitude and behavior to their perception of the diminished availability of aid within the community. When asked why they weren't seeking available aid, Molly lamented the slower pace of some of their neighbor's repairs and said, "we don't wanna take anybody else's help." In other words, over time as households experienced diminished offers of help – a shift in the ecology of aid – they expressed growing concerns about asking for help, even though the help was the same as what they had sought and accepted earlier in the recovery process.

One year after Hurricane Harvey, Claire, a Latina, married mother of three in her thirties, and her family were living on the second story of their home while their contractor continued to work on repairs to the flooded first floor. In the immediate aftermath of the storm Claire told us, "people were giving us meals, like, there was no time to do anything…I didn't have time to run to the store." A year later, Claire and her family's need persisted as they still had no working kitchen. While Claire had more time to shop for food, her family's meal options were severely limited without a stove or oven. Despite their continued

need, however, Claire was no longer comfortable accepting meals like her family had immediately after the storm. She told us that people in her social network largely assumed her family had completed their repairs. "They didn't realize, 'Wait, you're living upstairs with no kitchen?'" Others' presumptions that her family was no longer in need—despite still rebuilding their first floor—led Claire to avoid signs of being in need and help-seeking. She told us, "I feel awkward having people cook for us." While her family's need was less acute than immediately after the storm it was still present, but as the ecology of aid changed so too did Claire's comfort with seeking or accepting help.

Two years after the storm, Claire reflected on how her sense of whether it was appropriate to ask for help changed over time. She told us:

> I feel like, you know, two years later, it was like, I kinda shouldn't ask for help for stuff, but sometimes, I'm like, I really wish I had someone just to throw some ideas off of, or just to finish the menial little things here. But like before, you know, we had no walls…I felt like it was okay to ask for more help then. Now it's like I don't feel like I should ask for that much help.

She also described how in the aftermath of the storm she rarely had to actually ask for help because of how robust the local ecology of aid was, "People just showed up, we didn't ask for help, people were just coming in droves and saying, 'You need help.' And it's like, 'Okay.'" Changing perceptions of the availability and robustness of aid—whether or not it was being offered consistently and universally—informed flooded residents' ideas about the acceptability of help more generally. As flooded residents who were still in need came to see the local ecology as defined less by unprompted offers of aid, they also began to view help-seeking as potentially stigmatizing, and sought it less.

Moreover, in later interviews, respondents began to reframe their behavior in the immediate aftermath of Harvey as aberrant or out of character. When we spoke to her around the second anniversary of the storm, Samantha told us that she had recently seen a Facebook memory—a function of the website that shows posts individuals have made in years past—where she had asked for help. She reported being surprised at her own willingness to go online and solicit aid right after the floodwaters receded, telling us:

> I look at that and I'm like, I can't believe I would even put that on Facebook. Like that's, we're just, I'm just a very private person in that way. And I would never reach out to the mass public. More power to those people who don't feel weird about asking for help like that, but that's just never been me. So I look at these memories, I'm like, 'Oh my god, I did that?'

Samantha similarly viewed her willingness to ask for and accept help with meal preparation after the flood as unique to a moment when aid was readily available and constantly being offered. "When we got back into our house and still didn't have a kitchen, I posted again...'People have offered to cook for us, we finally need it.'... And so I asked. I set up my own meal train, which is just crazy. I would never ever, ever do that. But I did and people showed up."

When there was a high level of need paired with an outpouring of seemingly universal support from flood victims' social networks and the community overall, households more readily sought and accepted help. But as flooded residents perceived that offers of help were waning, they worried about judgment from their friends and neighbors who seemed less empathetic over time. They sensed that the local ecology of aid in the immediate aftermath of the storm had been an exceptional state. A return to equilibrium meant a return to an ecology of aid where offers of help were not the norm and households were expected to be self-sufficient. In other words, as the local ecology of aid changed over time, asking for and receiving aid became stigmatized. Flooded households grew increasingly uncomfortable with help-seeking and accepting aid, and they reframed their previous help-seeking as an anomalous deviation from their normal behavior.

Discussion

We have shown how actors can rapidly adjust their behaviors around accepting help in response to perceived changes in their local ecology of aid. In line with past research that has described a general cultural aversion to being seen as in need in the U.S. (Halpern-Meekin et al. 2015; Lamont 2000; Sherman 2009), the households in this study viewed themselves as givers not receivers of aid. However, in the immediate aftermath of Hurricane Harvey, they readily accepted various kinds of help from their social networks and volunteer civic and religious organizations—they accommodated their behaviors to the conditions under which aid was made available and how much aid was being offered. When offers of support were seemingly ubiquitous and universal, residents sought and accepted aid without fear of stigmatization. Yet, within a matter of months, they reported that the overwhelming outpouring of support had diminished. Flooded residents experienced less empathy and more frequent judgment about their repair progress, making the stigma of receiving aid an increasingly central concern. Subsequently they pursued aid less and refused available help even when their repairs were still incomplete.

On Rapid Changes and Ecological Theorizing

We have relied on an ecological perspective to understand how accepting help changed over time in Friendswood after Hurricane Harvey. Since the 1970s, ecological theorizing has been extended into examinations of professional and organizational fields (e.g., Abbott 1988), but here we reengage with earlier conceptualizations derived from city- and community-level studies (McKenzie 1924; Park 1936). Specifically, we utilize an insight from very early scholarship about the possibility of rapid changes to an ecology. W. I. Thomas noted that in times of crisis, actors tend to adopt new habits and standards (Park and Miller 1921). New vice laws, for example, brought about sudden changes in the ecologies of dance-halls and brothels, creating cooperation or competition among actors, e.g., police, proprietors, and social service organizations, which previously interacted in distinct ways (Cressey 1932; Reckless

1933) while influxes of new immigrants quickly altered neighborhood boundaries, institutions, and cross-ethnic group interactions (Zorbaugh 1929). In both examples, actors accommodated their actions to local conditions such that ecologies could stabilize into new sets of relations and patterns of interaction (Helmes-Hayes 1987).

In attempting to understand change over time, past work has revealed how ecologies are not impermeable nor entirely discrete (Abbott 2005). Here we have shown how shocks, like disasters, can be "generic theoretical instruments for explaining emergence and transformation" of an ecology (Liu and Emirbayer 2016, 75) because disruptions alter actors' sense of their environment and can ultimately lead to new behaviors. More generally, we have shown how behaviors are a product not of fixed identities, norms, or values, but instead evolve as individuals' relational contexts change. Sudden and inimical changes to context must be incorporated into theorizing a wide array of individual- and community-level outcomes, particularly over time (Rosen 2017). We have highlighted how disruptions can lead to rapid transformations of an ecology and subsequent interactions within them; temporality is key. A focus on the ecology of aid in Friendswood over two years reveals how attitudes and behaviors around help-seeking and accepting are quite malleable over a relatively short period.

Temporality and Stigma

Similar to past research on state-based aid, we find that informal and interpersonal forms of support that are not experienced as universal or freely offered are far more likely to be stigmatizing. While more longitudinal data on stigmatization and destigmatization is sorely needed (Pescosolido and Martin 2015), what the ecological perspective shows is that the sense and experience of informal aid as universal can shift rapidly among those in need. This means that the stigmatization of particular characteristics can change over long periods, as cultural attitudes shift (Clair et al. 2016), and can also change more quickly—over weeks and months—with new interventions (Dobransky 2020) or, as our case shows, when interventions, like local offers of disaster aid, are reduced or withdrawn.

Importantly, further incorporating temporality into examinations of stigma and stigmatization better accounts for paradoxical findings on the potential benefits and drawbacks of being labeled with a stigmatized identity (see Perry 2011). We reveal that stigmatization occurs as variation across household recovery increases over time. As offers of help faded, households compared their progress to that of their neighbors and the stigma of receiving aid stemmed in part from the fact that some residents required less help. When aid no longer appeared universally available, flooded households in Friendswood with ongoing recovery needs chose not to ask for help and even refused offers of help, slowing the pace of their own recovery and that of the community as a whole.

Social comparison across groups is an inherent part of stigmatization and research has begun to compare the levels of stigmatization of different identities (Pescosolido and Martin 2015; Quinn et al. 2019), but stigma researchers must also

pay close attention to within group variation and how comparisons across those with the same stigmatized characteristic yields further stigmatization (see, for example, Watkins-Hayes 2019).[4] In Friendswood, as the needs of flooded households became variegated, those who were further along in their repairs and those who were unaffected viewed their neighbors whose repairs progressed more slowly less and less as "victims." Being in need of aid may become stigmatized quite rapidly if the level of need is easily compared to others in the same ecology.[5]

Post-Disaster Aid and Resilience

Examining the process of recovery in Friendswood over two years reveals how the rapidly changing local ecology of aid created various forms of inequality and reduced resilience. The stigma that arose as offers of help became less robust, slowed the pace of recovery and amplified variation in recovery progress across households, leaving the community more unequal and less resilient overall. Full recovery for most households in Friendswood took much longer than the timeframe in which local aid provision was robust. In other words, there was a mismatch between flooded households' needs over time and how long help was readily available. In the immediate aftermath of the storm, the powerful effects of rapidly emerging and seemingly universal informal community support on flooded households' acceptance of help suggests that post-disaster aid policies that have automatic enrollment and for which all victims of a disaster are eligible regardless of pre-existing household characteristics will maintain high levels of support within affected communities. A rich local ecology of aid that similarly creates a sense of universal support also reduces stigma around accepting aid.

However, this finding also indicates that community-level resilience is difficult to achieve (Aldrich 2012; Tierney 2014), since the variation across households in their ability to recover from another flood is more varied than before the disaster. Not only did unaffected households become less attentive to the ongoing needs of those who flooded and lack a clear understanding of the extended timeline of recovery, but more recovered households also derided less recovered ones as time passed, leading less recovered households to become less likely to seek out help. Uneven recovery across households in Friendswood exacerbates unequal vulnerability to future flooding, which is no small concern given the likelihood of more extreme climate-related disasters. For post-disaster aid to be effective and support community-level resilience it must not only avoid stigmatizing households who accept it, but must also sustain over time.

[4] More generally, future work should pair individual perceptions of stigma with aggregate ecological characteristics since each has their own effect on stigmatization and subsequent behavior (Besbris et al. 2015; Besbris et al. 2019).

[5] Since means-tested programs inherently foster comparisons across those who qualify and those who don't, lack of comparison is another mechanism by which universal programs remain more stable and popular.

Given that our findings are derived from a particular community and a particular type of disaster, future research can expand and refine the ecological approach to understanding help-seeking and receiving in multiple ways. First, our analyses are based largely on flooded residents' reports of their changing ecology of aid.[6] Our own observations of Friendswood align with these reports but future work could operationalize the aid available post-disaster and more specifically quantify changes in the local ecology over time. In doing so, researchers could describe how affected residents' perceptions are related to more objective measures of available aid. Additionally, while our analyses of the ecology of aid are based on some observations and, to a greater extent, residents' perceptions, more in-depth, place-based ethnographies of post-disaster behaviors around providing and accepting help are warranted to better specify when the ecology of aid shifts. Indeed, more systematic periodization would allow for better management of post-disaster aid and resource distribution.

Second, past research in other contexts has revealed how various identities like race/ethnicity (Rooks et al. 2012) and gender (Fothergill 2004) as well as material circumstances (Sherman 2013) are consequential for accepting aid post-disaster and help-seeking more generally. Friendswood is largely White with a high median household income, and it is unclear how the stigmatization of help-seeking and accepting might occur differently or at all among households that have more past experience seeking help, more regularly face material hardship, or experience additional penalties and sanctions when they seek or accept help as a result of their disadvantaged characteristics. Future work can use the ecological approach to explore variation in help-seeking and accepting across different kinds of communities—more comparative research is certainly warranted. Third, the community of Friendswood remained largely intact following Hurricane Harvey, with limited damage to local churches, civic organizations, and schools. This meant that most residents remained, and there was a local population both giving and accepting help. In the context of disasters that lead to greater geographic displacement, the local ecology of aid may develop in different ways and may change at a different pace (see Erikson 1976). Additionally, future work can examine how the ecology of aid operates in communities with more renters, and how displacement intersects with the ecology of aid for renters more generally. Finally, the flooding wrought by Hurricane Harvey in Friendswood, while akin to flooding events that are growing in scope and scale more generally, is a particular kind of climate-related disaster that precipitates certain kinds of needs among affected households. That is, victims of tornadoes, wildfires, or heat waves, may seek and accept help in different ways. While this is ultimately an empirical question, we suspect that the material needs of victims of various disasters will be similar enough that an ecology of aid perspective will be useful for understanding post-disaster help-seeking and accepting. In other words, all disaster victims require some aid and the robustness, quality, and sources of this aid, as well as whether or not victims have to seek it out, are likely to change over time.

[6] On the importance of subjective post-disaster assessments of recovery see Raker et al. (2023).

Conclusion

It is no surprise that one of the most famous studies of community post-disaster, Kai Erikson's book *Everything in Its Path* (1976), concludes that proximity is key for understanding recovery. Collective sensibilities, fostered by proximity, shape how households are or are not able to engage nearby community resources. This article makes a similar point—individuals and households accommodate to their local collective conditions—while also highlighting the importance of temporality to reveal the value of ecological theorizing in analyzing how those affected by disaster behave after their lives are disrupted.

In the case of accepting help after a disaster, we have shown why ecological theorizing can be extremely useful. Not only are ecologies rapidly transformed when disaster strikes but these transformations help determine patterns of aid provision and reception (Stallings and Quarantelli 1985). To understand when and how individuals and households affected by disaster seek out and accept interpersonal aid when in crisis, future work must first be attuned to the broader ways help is made available. Is aid for recovery seen as universally or selectively distributed? Are there expectations of reciprocity? Do those in need have a clear sense of when aid might end or how it may be contingent? To what extent does the aid cohere or clash with the self-conceptions of those who are in need?

Prior work has shown that even when the eligibility for aid is broadened, it may not be sought by everyone in need. For example, in a study of help-seeking among households experiencing foreclosure, middle-class homeowners were apprehensive to engage resources that were targeted to working-class households even when these resources were available and could help forestall middle-class households being forced out of their homes (Owens 2015). Other work has shown that aid that is given with expectations of reciprocity may in fact reduce help-seeking, though these patterns vary by class position and social network context (Nelson 2000; Raudenbush 2016; Torres 2019). Help-seeking and receiving is as much a matter of the ways in which it is provided as it is a matter of need.

Additionally, to understand if and when those affected by disaster seek or accept help researchers must examine how those in need compare themselves to others. Who else is seen as a deserving victim and how are these others treating aid? Who is more or less advanced in recovery and are these differences attributed to individual-level factors or structural disparities? We found that comparison to others who were affected by Harvey limited flooded households' help-seeking and even their acceptance of offered aid as time went on. Similar patterns exist over time among laid off professionals who become more likely to view their lack of employment as a personal failing when they compare themselves to others who are getting jobs (Sharone 2014).

More generally, we have shown that time is an essential factor in understanding help-seeking and acceptance. Temporality is increasingly in the foreground of sociological theorizing and in understanding the sociological impacts of climate change and climate-related disasters more specifically (Reid 2013; Tavory

and Wagner-Pacifici 2022). The changes in help-seeking attitudes and receiving behaviors in Friendswood after Harvey were linked to changing ecological factors. The differences in the amount of help being offered as well as the more ineffable changes in collective sentiment over time produced distinct patterns around accepting help. Such changes will inevitably become more observable as climate-related disasters expand in severity and scope, affecting more and more local ecologies of aid and testing the overall resilience of more and more communities.

Acknowledgements We thank Marbella Allen and Bethany Lewis for their excellent research assistance. For comments on previous drafts we are grateful to Mustafa Emirbayer, Philip Garboden, Cayce Hughes, Rachel Kimbro, and Chad Alan Goldberg.

Funding This research was funded by the Russell Sage Foundation (1808-07960) and a grant from the School of Social Sciences at Rice University.

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