

to increase awareness and strengthen ties among community members that can enhance their capacity to mitigate, prepare for, cope with, respond to, and recover from disasters. As Easterly (2001) eloquently states, behind development are the “sufferings and joys of real people” (p. xiii). Development should not only contribute to enhancing the life conditions of impoverished populations, but should also reduce the impacts and outcomes of disasters, particularly among the poor and other disenfranchised population groups.

As social events, disasters reflect all aspects of social life. Therefore, it is important to study demographic changes and the economic development of the region simultaneously because it affords an opportunity to examine and better understand social vulnerability. This can also facilitate the development of policies to enhance community and individual resilience to disasters. For example, strengthening social ties through the creation of suitable community mechanisms to promote mitigation and preparedness will contribute to mitigate the impacts of disasters.

Finally, government and public policy officials need to develop emergency preparedness and response plans and strategies that reflect the needs of a changing population with relatively high levels of vulnerability. The transformation of the age structure, resulting in an increasingly elderly population as well as an increase in the population with physical and mental disabilities, presents challenges but also generates opportunities to develop disaster preparedness, response, and evacuation policies and initiatives to meet the needs of these population groups. We also need to consider that, as argued by Sen (1999), the solution to long-standing problems, possibly generated or exacerbated by development, requires that institutions take us beyond a capitalist market economy and address the reverberations of different forms of inequality. This is imperative if we are to reduce the devastating impacts of disasters.

Chapter 12

Disaster and Social Vulnerability: The Case of Undocumented Mexican Migrant Workers

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Although most natural disasters are random events, the effects that they have on individuals are not completely arbitrary. Researchers in the disaster field have proposed that disasters are actually a combination of human, social, and natural hazards (Wisner, Blaikie, Cannon, & Davis, 2004). For example, individuals from lower socioeconomic groups, non-English speakers, or the elderly are differentially at risk for experiencing a disaster for a number of economic and social reasons (Bolin & Stanford, 1991; Ensor, 2008; Fothergill & Peek, 2004). We argue that, given their social status in the United States, undocumented immigrants are particularly at risk not only for being affected by a disaster, but also for encountering difficulties during the response and relief phases of disaster. As a result, they experience disproportionately adverse consequences following disaster due, in part, to their predisaster marginalized status. Phillips, Metz, and Nieves (2005) suggest that each additional condition of risk—whether situational, demographic, or material—that affects an individual also increases their level of vulnerability to a disaster. We view the social conditions surrounding undocumented immigrants as creating a “perfect storm” in which disaster creates an exceedingly vulnerable population with access to few supports. Our discussion of undocumented workers thus is one that stretches the construct of resiliency when the power of endurance of particular marginalized groups is considered.

The construct of resilience has received recent interest from disaster researchers as a counterpoint to the examination of vulnerability factors. Of interest in this

work is the capacity of and length of time required by a community to recover from a disaster with little or no external assistance. Although the study of resiliency is not new to the field of psychology, the conceptualization of resiliency in disaster research is much more recent and varied (Manyena, 2006).

Resilience research evolved from psychological disciplines with the intention to capture the etiology and prognosis of the children of parents with schizophrenia (Manyena, 2006). Studies in this area found that among these children, who were at high risk for psychopathology, was a subset of children who had healthy adaptive patterns (Garmezy, 1974). The discovery that some children had a positive adaptation despite adversity spawned the emergence of studies on resilience. Currently, resilience is applied in several fields, especially in disaster-related research that has begun to focus on what at-risk communities can do for themselves and how to best strengthen them (International Federation of Red Cross, 2004).

Resilience is conceptualized as either an outcome or a process leading to a desired outcome. As an outcome, resilience is the ability of a person who is exposed to a hazard stress or highly disruptive event to cope and maintain relatively stable, healthy levels of psychological and physical functioning (Bonanno, 2004; Pelling, 2003). Scholars in both psychological and disaster disciplines have noted difficulties with the view of resilience as an outcome (Luthar & Brown, 2007; Manyena, 2006). In psychological research, the notion of resilience as an outcome has focused on the absence of posttraumatic stress disorder (PTSD) symptoms as an indicator of resilience. However, this type of conceptualization neglects other important domains of functioning that could be profoundly impaired, such as troubled interpersonal relationships, alcohol or drug use, conflicts in work functioning, and loss of employment (Luthar & Brown, 2007). Much of the psychological research on resilience as an outcome also tends to focus on an individual's personal attributes such as personality traits (e.g., hardiness) with little attention to the degree to which these attributes are dependent on external assets, such as social support systems (Luthar & Brown, 2007; Roisman, 2005). In disaster management work, the view of resilience as an outcome tends to reinforce the tradi-

tional reactive stance of disaster management (McEntire, Fuller, Johnston, & Weber, 2002). Manyena (2006) similarly noted that outcome-oriented disaster resilience programs tend to adopt a command and control style that preserves the status quo, entrenches exclusion, and removes attention from the issues of inequality and oppression.

As a process, resilience is conceptualized as the capacity to utilize a set of intrapsychic and social processes that moderate the ability to cope and adapt (Jaccelon, 1997; Luthar & Brown, 2007). From this perspective, resilience resides not only within the person, but also from the interplay between the individual and his or her quality of relationships with family and community. The central objective of process-oriented resilience research is to identify protective factors that might alter the negative effects of adverse life circumstances or events. Protective factors are those that modify the effects of risk in a positive direction. This can range from an individual's support network to cultural and community adaptation strategies.

Manyena (2006) argued that disaster management should place an emphasis on the process-oriented conceptualization of resilience. That is, focus should be on the processes in which people and communities engage in to recover from a disaster. This approach empowers a community to recognize that community-based adaptation strategies, culture, knowledge, and experiences are valuable in disaster resilience.

Research on the vulnerability of Latinos has found that they are at particular risk following a disaster given their disproportionate access to financial and material resources (Carter-Pokras, Zambrana, Mora, & Aaby, 2007). However, from a process-oriented resilience perspective, scholars have noted significant cultural factors that may serve as protective factors. Clauss-Ehlers and Levi (2002) described these protective factors as cultural community resilience because of their ability to protect against destructive forces in the environment. For example, one factor is based on the cultural value of familismo. *Familismo* is an individual's strong identification with and attachment to nuclear and extended families. Fami-

lismo stems from a collectivistic worldview in which cooperation and self-sacrifice for the group is expected (Castillo & Cano, 2007). Family is one of the most important cultural resiliency factors within the Latino community (Clauss-Ehlers & Levi, 2002). Although Clauss-Ehlers and Levi's work was based on resilience in regards to violence in the community, the concept of cultural community resilience has implications for developing culturally competent disaster response work, particularly with undocumented Latinos.

The Status of Undocumented Latinos in the United States

An estimated 11.5 million undocumented immigrants live in the United States and Latinos account for approximately 57% of those with undocumented status (Hofer, Riytani, & Campbell, 2006). Mexico is the leading source of undocumented immigrants at 6.6 million followed by El Salvador, Guatemala, the Philippines, and Honduras (Hofer et al., 2006). Although it is unknown how many undocumented Latinos cross the U.S. border each day, recent demographic studies suggest that the number of undocumented immigrants grows by half a million people each year (Passel, 2006).

Contrary to popular belief, undocumented immigrants make substantial contributions to the U.S. economy. According to the National Immigration Law Center (2007), most undocumented workers are between the ages of 18 and 39 years and constitute more than 12.4% of the nation's work force. Approximately 63% of foreign-born workers, particularly those from Latin America, work in high-risk and low-wage service, manufacturing, and agricultural occupations. It is estimated that without the contributions of immigrant labor, the civilian labor force would have only grown to 5% versus the 11.5% it encountered between the years of 1990 and 2001 (National Immigration Law Center, 2007). In the United States, undocumented workers move from state to state in search for jobs but tend to live and work in states along the coast and near the border (e.g., Arizona, California, Texas, and Florida), which are areas prone to natural disasters (Federal Emergency Management Agency [FEMA], 2008). This should be of major concern because, although undocumented Latinos account for a large portion of the immi-

grant population and make significant economic contributions to U.S. society, their safety is often overlooked and they are granted few government resources in the face of a disaster.

Latino Vulnerability to Disaster

Much of the literature tends to group Latinos into one generic ethnic group. However, there are various differences within the Latino population, including differences between legal Latino residents and their undocumented counterparts. Studies conducted on undocumented immigrants show that they are a distinct population unto themselves (Macnaughton, 2008). Compared to documented Latinos, undocumented individuals are pervasively affected by exploitation, vulnerability, physical, mental, and emotional hardships, lower or uncertain wages, lower employment status, less English proficiency, less education, poor housing, less health insurance coverage or access to care, poor quality of care, and a fear of deportation that inhibits help seeking behavior (Macnaughton, 2008; Sullivan, 2005). When examining the affects of disasters on the Latino population, many of the within-group differences become more salient and many of these vulnerabilities are exacerbated post-disaster.

Poverty

Among the most prevalent vulnerabilities of undocumented Latinos is their economic status. With national poverty rates at 12.6%, Latinos account for 21.8% of all poverty and more than 28% of child poverty in the United States. Latinos have the lowest overall median personal income, earning 28.51% less than White Americans and 35% less than Asian Americans (Rector, 2006; Rivera, 1999). Undocumented Latino migrant workers have a poverty rate that rivals that of non-immigrant Black Americans in the United States and is nearly three times the rate of nonimmigrant, non-Latino, White Americans (Chapa & De La Rosa, 2006).

The majority of undocumented immigrants work full-time in jobs that pay below a living wage, less than the legal minimum wage, and are the lowest-wage occupations (University of Illinois at Chicago & Center for Urban Economic De-

velopment, 2000). The literature suggests that the shortfall in the earnings of undocumented workers may be explained by their low educational attainment, limited on-the-job experiences, limited English proficiency, and other gaps in skills relative to those of legal residents. A study conducted by Rivera (1999) suggested that the lower wages of Mexican undocumented immigrants in the United States are partly associated with exploitation or discrimination based on their legal status. The study suggests that the wage gap may also be related to the particular occupations and industries where undocumented immigrants cluster because of the need to be sheltered from detection (Rivera, 1999). Another possible explanation to this disparity may be that Latinos, both immigrants and native-born, tend to have low educational attainment, with more than half lacking a high school diploma (U.S. Census Bureau, 2006a).

The economic disparity undocumented workers face puts this population at an increased disadvantage for recovering from a disaster. Low-income Latinos have been found to be at particular risk recovering from a disaster due to a lack of equitable access to financial resources (Bolin & Stanford, 1998). A longitudinal study conducted by Carter (2007) highlighted that the environmental shocks of disasters further disfranchises the poor and traps them in impoverished positions from which they do not have the resources and support to recover. The study's recovery analysis showed relatively wealthy households being able to partially rebuild and recover from their loss as a result of Hurricane Mitch. In contrast, for families with lower incomes, the effects of the hurricane on assets were of longer duration and were felt much more acutely (Carter, 2007).

Similarly, Bonanno's (2007) study on psychological resilience after the September 11th terrorist attacks found that material resources and income were significant predictors of resilience. Compared to participants with no income loss, those who experienced an income decline were less than half as likely to be resilient. A similar study found that people with low incomes living in neighborhoods characterized by an unequal income distribution had higher levels of depression than those living in neighborhoods with equitable incomes in the aftermath of a

disaster (Ahern, 2006). As is the case for undocumented Latinos, Ahern infers that groups that are more dependent on local resources or more socioeconomically marginalized may be increasingly affected by the limited availability of resources in a community and their perceived socioeconomic status, which may explain the associations between income inequality, depression, and resiliency.

Housing

Racial and ethnic minority groups experience considerable housing problems in a disaster (Fothergill, Maestas, & Darlington, 1999). Many racial and ethnic minorities reside in low-income areas in which housing may consist of mobile homes, houses that are poorly constructed, and those in locations that are disproportionately exposed to natural hazards (Bolin & Stanford, 1991; Cutter, Boruff, & Shirley, 2003; Fothergill & Peek, 2004; Mileti, 1999). For Mexican undocumented workers, these housing issues are exacerbated by the lack of permanency that characterizes migrant life. Given their economic status, they are more likely to live in a low-cost rental property that exposes them to risk, either due to its location in an area that is vulnerable to disasters or to poor construction quality.

Peguero (2006) found that Latino homeowners in Florida were significantly more likely to report friends and family members outside of the home as an important source of information about hurricane preparedness and evaluation compared to Latino and non-Latino homeowners. For Latinos who are migrants, their transient social networks will limit their ability to rely on this method of obtaining information. Fothergill et al. (1999) recognized that ethnic and racial minorities often confirm emergency information with family members before taking action, which can delay their process of preparation and evacuation. Because the social network of undocumented workers is less established, they have fewer opportunities to contact neighbors or family members to obtain more information or to evacuate with them. In addition, leaving known areas increases the probability that they will be seen by authorities, which is a persistent concern for undocumented Mexicans. These circumstances mean that it is more likely that migrant workers

will remain in their current housing, regardless of its structural qualities, rather than evacuate.

Latinos are also at risk for continued vulnerability after a disaster. The burden of living in inadequate housing in disaster prone areas is exacerbated by the lack of insurance. Latino households are less likely to have adequate home or rental insurance and are less likely to access aid from federal programs targeted to those in need, despite suffering greater affects (Bolin & Stanford, 1991). For migrants, because insurance requires identification, it is not commonly sought. Language is an additional burden regarding housing issues postdisaster. Phillips (1993) found that citizens and immigrants who could not speak English faced difficulties post-disaster because landlords typically only spoke English and rental agreements were only in English. Income and class differences also affect how and where the reconstruction of rental properties or low-cost housing occurs. Oliver-Smith (1996) studied reconstruction following an earthquake in Peru and found differences in where reconstructed houses were placed as well as in the quality of materials with which they were rebuilt. Thus reconstruction of low-cost housing can perpetuate the inequities in the safety of housing where migrant workers live.

Health

Overall, studies suggest that Latinos are especially vulnerable to both health and health care access disparities compared to other ethnic groups (MacNaughton, 2008). MacNaughton suggested that Latinos, as a group, suffer higher mortality rates from type II diabetes, renal disease, gastric cancer, liver disease, homicide, and HIV than non-Hispanic groups. However, the overall health of most Latino immigrants is good when they first arrive in the United States. The level of health deteriorates as they become more acculturated, which is due to several risk-related factors (Cavazos-Rehg, Zayas, & Spitznagel, 2007; Harrell & Carrasquillo, 2003). Vulnerability for undocumented Latinos is exacerbated by the fact that the jobs they pursue in North America often provide greatest exposure to unhealthy environments. Fiscella (1997) suggested that work exposure to toxic substances and physical hazards are major contributors to illness, disability, and death among un-

documented Latinos. Contributing to this vulnerability, workers are found to receive few, if any, benefits such as sick leave, health care coverage, and other services used to offset the effects of the hazardous working conditions to which they are exposed on a daily basis (Fiscella, 1997). According to Quinn (2000), more than 75% of all undocumented immigrants lack health insurance because most of the programs require proof of legal residency (Macnaughton, 2008). Furthermore, undocumented Latinos have legitimate concerns about their undocumented status, which may negatively impact their overall quality of health (Cavazos-Rehg et al., 2007). Other researchers (Slone et al., 2006) have similarly noted that Latinos in Mexico who were affected by disaster experienced significantly higher levels of health symptoms than those who did not experience a disaster.

Examples of such vulnerabilities could be seen in the wake of Hurricane Katrina. Messias and Lacy's (2007) study on the health related concerns of Latino survivors and evacuees suggests that decisions to neither evacuate nor return were mostly due to personal or family health concerns. Following the storm, Messias and Lacy (2007) reported that participants of the study experienced a variety of "physical symptoms (e.g., hunger, headaches, nausea, chest pain, shortness of breath, and earaches) and exacerbation of chronic diseases (e.g., hypertension, diabetes, and asthma) to sleep disturbances, fear, anxiety, and depression" (p. 446). Cavazos-Rehg et al. (2007) found that 39% of Latinos in their sample did not visit governmental or social-support agencies due to fear of deportation, suggesting that when undocumented workers do experience health problems, they may be reluctant to seek out medical care. Congruent with previous finds, Messias and Lacy (2007) also found that access to health care was a key concern that makes it difficult for this population to rebound from a disaster.

Psychological Vulnerability

Racial and ethnic minorities' ability to adjust to and recover from the effects of disaster is a field that is in need of more research (Strug, Mason, & Heller, 2004). It is clear that minority groups are differentially at risk for experiencing disasters by virtue of their lower economic status and the likelihood of living in

disaster-vulnerable housing, such as in mobile homes or within flood plains, and are less likely to evacuate for a variety of reasons when a disaster is anticipated. As certain populations are more likely to experience, a disaster research suggests that they are then at higher risk for PTSD or other psychological responses to disaster (Turner & Lloyd, 2004). However, Perilla, Norris, and Lavizzo (2002) suggested that differential exposure to disaster does not completely account for differences in the levels of PTSD found in Spanish-speaking Latinos postdisaster. Their study suggested that nonacculturated Latinos were more likely to experience intrusive thoughts in response to event-specific trauma than were acculturated Latinos. It may be the case that undocumented immigrants may be more likely to exhibit PTSD than their more settled counterparts because they are some of the least acculturated Latinos in the United States.

Immigrants are often exposed to disaster-related events before arriving in the United States. It has been estimated that 80% of those affected by disaster live in developing countries. Mexico is at risk of many of the same disasters that occur in the United States, including hurricanes, flooding, and earthquakes; immigrants from some Central American countries, particularly those from Nicaragua and Honduras, have been subjected to the affects of large-scale natural disasters, most notably, Hurricane Mitch in 1998. In addition, some researchers have found that many immigrants have PTSD related to war or civil conflicts (Cervantes, Snyder, & Padilla, 1989; Pantin, Schwartz, Prado, Feaster, & Szapocznik, 2003). Exposure to these events increases the likelihood of immigrants experiencing PTSD even before they enter the United States and thus they are more psychologically vulnerable to experiencing PTSD symptoms in later disasters.

Migration is one of the most radical life changes that an individual can experience in that migration necessitates change of place, personal relationships, employment, changes in housing, and other connections to the community (Greeff & Holtzkamp, 2007). Individuals vary with the extent to which migration stress affects their mental health (Bhugra, 2004). Living in the United States without documentation is a risk factor associated with a range of negative outcomes (Blanco-

Vega, Castro-Olivo, & Merrell, 2008), and this preexisting stress may contribute to the psychological outcomes of disaster. In addition, Santos-Hernández (2006) reported that transportation, sheltering, and access to food distributed postdisaster is problematic for undocumented migrants. The lack of these supports almost certainly affects the stress level and mental health of the undocumented migrant.

Disaster Relief

Currently, undocumented immigrants qualify for crisis counseling, disaster legal services, and other short-term, noncash emergency aid provided by the federal government. However, they are not eligible for disaster unemployment assistance, temporary housing, or FEMA cash assistance programs. Under current FEMA regulations, "having a social security number does not automatically mean that an individual is a 'Qualified Alien'" (FEMA, 2004). Thus, even immigrants who have a valid social security number may not automatically be eligible for disaster aid (FEMA, 2004).

Even though FEMA provides disaster legal services to help immigrants deal with the immigration legal issues, many immigrants do not use or receive these services due to misunderstandings caused by language barriers. Similarly, undocumented immigrants seeking disaster mental health services occasionally cannot take advantage of this crucial service because bilingual disaster mental health professionals are not available. Although disaster officials claim that no one, regardless of their status, is denied basic services such as food, water, medical care, shelter, and clothing during and immediately following disaster, recent reports question the "fair accessibility" of these services. Most immigrants often refuse to seek help at the cost of being deported during the process. Even U.S. citizens and legal-resident Latinos are often presumed to be "illegal" and are denied or discouraged from seeking assistance to which they are entitled.

Families of undocumented residents with native-born children can file for certain disaster services on their child's behalf but must present a social security number (Muniz, 2006). This back door approach to receiving government services is a legitimate practice recognized by FEMA but is rarely communicated to the

public. With little to no government assistance, undocumented residents are forced to look elsewhere. Entities such as charitable, religious, and non-profit organizations often fill the service gap the government left behind, but even then immigrants are reluctant to seek community services for fear of being reported and persecuted by the increase of anti-immigrant sentiment in the media across the United States. In addition, nonprofit resources are usually time-limited following a given disaster and seldom provide permanent housing.

Cases of Undocumented Latino Immigrants' Vulnerability During Disasters

Although little empirical research exists on the experiences of undocumented workers in the United States that are exposed to disaster, anecdotal reports suggest that they experience barriers not experienced by other Latinos. In some cases, these reports suggest that instead of mitigating disaster risk, emergency management procedures actually exacerbate risk or impede recovery of undocumented workers and their families.

Southern California Wildfires

The literature describes many factors that increase the vulnerability of undocumented Latinos. This vulnerability is highlighted for those who have lived through a disaster such as the San Diego, California, wildfires. On October 21, 2007, a series of devastating wildfires engulfed the San Diego region, forcing thousands to flee and seek shelter. Among the evacuees were a large percentage of undocumented Latinos. Shortly after the fires were contained and the damages were assessed, reports of mistreatment and discrimination against undocumented individuals in the area began to pour in to advocacy centers.

A report produced by the San Diego Immigrants Rights Consortium and American Civil Liberties Union (ACLU) of San Diego and Imperial Counties highlights the discrimination and service disparities as reported by victims and witnesses themselves (ACLU, 2007). Instances of mistreatment include families of evacuees' detained by Border Patrol agents, charged with looting and failure to provide proper identification. Others report police officers circulating through

shelters, waking up families, asking for identification, and escorting them out if they fail to do so. Witnesses attest that at least 25 families of evacuees left shelters out of fear they too would be apprehended and deported. Similar feelings of apprehension toward seeking services were seen at other disaster relief centers where a noticeable presence of Border Patrol agents and National Guard troops stationed near FEMA and Red Cross canopies created a climate of intimidation that may have very well prevented other undocumented individuals from seeking support. Overall, the report cites undocumented residents had the hardest time receiving services despite, in many cases, having the greatest need. The majority of residents were afraid to seek services due to the reports that Border Patrol officials were confronting individuals at evacuation centers (ACLU, 2007).

Several reports exist of residents who failed to evacuate because they feared that leaving their communities would expose them to possible deportation. In the aftermath of the California wildfires, "half dozen charred bodies have been uncovered in the ashes—bodies that authorities believe are those of illegal immigrants who did not get out of harm's way fast enough" (Navarrette, 2008, p. 18). Navarrette speculates another possible reason for their inability to evacuate may be due to the failure of the "reverse 911" warning system, which was not set up to service the Spanish-speaking community.

The World Trade Center

In the aftermath of the September 11th attacks on the World Trade Center, among the thousands of dead and unfortunate victims were dozens of undocumented individuals working in the towers at the time of their collapse (Tutek, 2006). A *New York Times* report by Greenhouse (2001) covered the struggle of the families of the workers as they tried to obtain disaster relief services after the attacks. Their undocumented status made it nearly impossible for them to collect survivor benefits. Testimonials from widows of undocumented workers tell of people "scared to apply for welfare and food stamps for fear that government officials may tip off immigration authorities and have them deported" (Greenhouse, 2001). Tutek (2006) reported that after an investigation of at least 68 reported

cases of undocumented relatives seeking services, only a few were successful in obtaining benefits. The task of identifying the bodies and mourning for the death of undocumented workers proved to be equally arduous because undocumented immigrants feared to identify the remains of their loved ones for fear of deportation (Kerwin, 2006). After the attacks, the commissioner of Immigration and Naturalization Service encouraged immigrants who lost loved ones to come forward and identify their relatives with assurances they would not be arrested or deported (Kerwin, 2006). Even then, “workers who lacked green cards were never included on the list of names to be read at the Ground Zero Memorial, leaving victims to be mourned only by their families a half a world away” (Tuket, 2006).

Hurricane Katrina

One of the most noticeable features of the aftermath of Hurricane Katrina has been the arrival of large numbers of migrant workers eager to join the massive reconstruction operations (Ensor, 2008). An anthology created by Henderson (2007) illustrates interviews of undocumented immigrant victims of Hurricane Katrina. Interviews with migrant workers detailing instances of oppression in which they were hired for the reconstruction and cleaning of flood damaged areas and were never paid at the end of the day. Others tell of times they worked in hazardous conditions, such as working in heights, rust, mold infestations, and toxic chemicals with little to no protective equipment. Many of the interviewees complained of numerous symptoms related to infections, respiratory problems, and psychological trauma. Overall, immigrants spoke of the hardships encountered in leaving their families behind, having to live in condemned residences infested with mold due to lack of housing for undocumented workers, resorting to alcohol as a way to cope, sleep deprivation, hunger, poverty, unemployment, and lack of access to health care (Ensor, 2008). Some immigrants also reported daily stress associated with legal issues and the constant threat of raids by Immigration and Customs Enforcement authorities (Henderson, 2007). Such observations are supported by similar works of literature reporting that “post-Katrina arrivals often suffered unfair treatment by employers, lack of payment of wages (Browne-

Dianis, Lai, Hincapie, & Soni, 2006), and lack of access to health care and safety precautions” (Aguilar & Podolsky, 2006).

Texas Border Enforcement

Most recently, adding to the disparities of care and disaster services available to undocumented immigrants, the Department of Homeland Security authorized Border Patrol agents and other immigration officials to screen residents suspected of being undocumented prior to boarding or entering evacuation buses and shelters (Taylor, 2008). As reported by a local newspaper in Brownsville, Texas, “the Border Patrol will be checking the legal status of the residents at hurricane shelters, and anyone who is undocumented will not be allowed to board evacuation buses. Instead, they will be moved to a detention facility in a safe area of the state” (Taylor, 2008). Such policies alarm local residents, disaster managers, and undocumented residents who say evacuation orders will be ignored. Taylor (2008) reports that “local, legal, and advocacy groups say the policy will unfairly jeopardize the poor, elderly, and those with limited English-speaking ability.” Even state government officials have denounced such disaster planning; a spokeswoman for the Texas Governor’s Office stated “the governor’s office prefers that the Border Patrol not use checkpoints during times of evacuation for obvious reasons” (Brezosky, 2008).

Reactions from local undocumented residents show that they are afraid and worried about their families. An article from the *Brownsville Herald* quotes undocumented residents as saying that with this development, they have no choice but to ride out the disaster. “Instead of offering us help when we need it most, they’re threatening us with deportation. It’s like they are taking advantage of a disaster to go fishing for undocumented immigrants. It’s like they’re asking us to commit suicide” (Martinez & Sieff, 2008).

The Sociopolitical Milieu and Disaster Vulnerability

The cases of mistreatment of vulnerable individuals as demonstrated in the San Diego wildfires and Hurricane Katrina can be seen as a product of current

U.S. immigration policy. Living in a country that has become increasingly concerned with issues of border security exacerbates the discriminatory behavior many undocumented Mexican migrants encounter during times of disaster. The society-sanctioned implementation of discriminatory behaviors is well demonstrated by U.S. immigration policy. Analysis of immigration statistics suggest that U.S. immigration policy has traditionally been based on nationality quotas that favor immigrants from Canada and Europe and restricts immigrants from Africa, Asia, and Latin America (Edmonston & Passel, 1994). When threats to national interest arise, whether economic or terrorist (e.g., 9/11 attacks), U.S. immigration policy tends to focus on the U.S.-Mexico border and the perceived threat to national interest posed by the influx of Mexican immigrants (Lee & Ottati, 2002). Although the U.S.-Canadian border is no less of a threat to national security than the U.S.-Mexico border (Gibbins, 1997), most U.S. resources (e.g., increased spending on Border Patrol, expansion of border wall, etc.) and policies focus attention on the perceived threat of undocumented Mexicans. Some scholars suggest that this unbalanced focus of attention on U.S.-Mexico border rather than immigrants crossing through the Canadian border may be attributed to out-group bias (Lee & Ottati, 2002). Out-group bias is the tendency to evaluate ethnic out-groups more negatively than the ethnic in-group, such that differential evaluation may result from in-group favoritism or prejudicial devaluation of the out-group (Tajfel & Turner, 1986).

A study conducted by Lee and Ottati (2002) demonstrated in-group favoritism and out-group bias as a determinant of attitudes to U.S. immigration policy. Lee and Ottati predicted that Anglo Americans would have greater support for California's Proposition 187¹ when it affected a member of the out-group (i.e., Mexican) than when it affected a member of the ethnic in-group (i.e., Anglo-Canadian). Half of the study participants were read a scenario that involved an

¹Proposition 187 was approved by the State of California in 1994 and deprives undocumented immigrants of welfare benefits, education, and all but emergency medical care. It also requires teachers, police officers, and welfare workers to report any knowledge of undocumented individuals to the Office of INS for purposes of deportation.

undocumented Mexican immigrant and the remaining participants read an equivalent scenario describing an undocumented Anglo-Canadian immigrant from Vancouver. Results of their study showed that Anglo American participants had greater support for Proposition 187 when it affected the Mexican immigrant (ethnic out-group member) than when it affected the Anglo-Canadian immigrant (ethnic in-group member).

Anti-immigration policies also culturally sanction discriminatory behaviors toward Mexicans/Mexican Americans regardless of citizenship. This can create a culture of fear for many Mexicans/Mexican Americans. In a report by the ACLU of San Diego covering the treatment of Latino immigrants during the 2007 San Diego fires, it was noted that many of the Spanish-speaking population said they were frightened to ask for services, even though many were legal residents or U.S. citizens (ACLU, 2007). Many Latino evacuees who were citizens were approached and interrogated by police while carrying donated provisions from the evacuation center to their cars. Latino evacuees also reported apprehension of leaving the evacuation center or considered leaving without food and water supplies because of fear of being accused of stealing. The report stated that White evacuees carrying cases of water and food were not detained, interrogated, or accused of stealing by police, whereas numerous Latino families experienced racial profiling.

The ethnic bias toward undocumented Mexican immigrants and subsequent heightened border vigilance may place Mexican immigrants at a significant risk during a disaster because it may affect how individuals respond during emergencies such as mandatory evacuations (Carter-Pokras et al., 2007; Núñez & Heyman, 2007). One example of this is a prescreening plan that was scheduled to be implemented by the Border Patrol in the Texas Rio Grand valley in the summer of 2008 (Taylor, 2008). According to Taylor, the Texas Border Patrol planned to prescreen Rio Grande Texas residents who are expected to evacuate the region on school buses if a hurricane presents imminent danger to the community. However, due to the deep sense of obligation to family, many U.S. citizens living in the Rio

Grand valley will ignore the mandatory evacuation orders to stay with and not endanger undocumented family members (Núñez & Heyman, 2007; Taylor, 2008). Núñez and Heyman (2007) refer to this type of decision-making process as the morality of risk. The morality of risk refers to an individual's sociocultural framework for evaluating courses of action amid serious risks. That is, individuals are willing to take serious risks because of a perceived strong moral demand. Policies such as the Rio Grand Border Patrol prescreening plan limit the mobility of undocumented Mexican immigrants and U.S. citizens because of the cultural norm (i.e., moral demand) that family members are taken care of even at the risk of personal safety. The freedom and accessibility of movement is not only fundamental to an individual's well-being but essential in a time of disaster (Núñez & Heyman, 2007).

It is clear that many U.S. immigration policies affect the bias toward Mexican immigrants (as well as Mexican American citizens) and mobility during an emergency. Thus, it is important to consider the affect of policies on undocumented immigrants. Núñez and Heyman (2007) suggest some issues to consider regarding undocumented individuals and mobility. First, trapping forces (e.g., Border Patrol) may cut the population off from service provision points; thus, alternative mechanisms must be created to reach these individuals. Second, programs and policies need to take into account the compounded effects of factors such as limited transportation, limited geographic knowledge, fear of immigration law enforcement, and mistrust of governmental agencies. Finally, the moralities of risk may differ from the U.S. culture. Awareness and knowledge of the issues that hinder mobility and access to service during a disaster is critical in shifting perceptions and procedures in the delivery of potentially life-saving services.

Conclusion

Undocumented immigrants from Mexico face several factors that not only make them differentially at risk for experiencing disaster, but also limit their successful recovery following disaster. When resilience to disaster is conceptualized as an outcome, the varied social and political factors that surround life as a mi-

grant worker are minimized. However, it is the layering of broader societal factors such as poverty, substandard housing, and legal status that profoundly impact the psychological well-being of migrant workers who experience disaster. Because migrant workers tend to deliberately avoid notice, it has been difficult to study the process by which these individuals recover from disaster. However, reports from recent disasters such as the California Wildfires and Hurricane Katrina suggest that several societal factors impede, rather than support, recovery of migrant workers. In addition, cultural factors that may serve as psychologically protective in the documented Latino community, such as familismo, may be of far less power for undocumented migrants who are far from their families in Mexico. Finally, current anti-immigration policies may serve as an additional stressor for migrant workers affected by disaster. Together, these factors suggest it is the social conditions that surround undocumented immigrants that conspire to create a "perfect storm" of vulnerability rather than preexisting psychological traits that reside in the individual.