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Ecologically Based, Culturally Concordant Responding Following Disasters: The Counseling Psychologist's Role

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Abstract

This article reviews the existing theory, research, policy, and practice of disaster mental health and the role of counseling psychology in post-disaster and catastrophic situations, all from a social justice perspective. Specifically, we discuss the phases and stages, social ecology, and individual reactions to disasters. A case study is presented, followed by mental health interventions and counseling psychology's role in these interventions at both the individual and systemic levels. We conclude with an overview of professional issues that often emerge when working in disaster areas, cultural issues that arise, and ways for counseling psychologists to become involved in this work.

Keywords

social ecology, culturally sensitive, disaster response, counseling psychology, professional roles, intervention strategies

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A four-fold increase in natural disasters over the past three decades (World Health Organization [WHO], 2008) has generated a rapidly increasing literature to guide mental health practitioners who confront the aftermath of natural and human-caused disasters. These disasters, both natural and human-made, cross social class, culture, race, and gender lines in disparate ways. Disaster mental health, then, is an emerging field that seeks to provide culturally appropriate mental health interventions and is based on the experiences of a diverse array of individuals, community, and governmental organizations (Halpern & Tramontin, 2007; Jacobs, 2007; Kessler & Wittchen, 2008; Kronenberg et al., 2008). The distinctive literature in disaster response combines decades of wisdom from personal experience with policy at multiple levels as well as an increasingly rigorous research base.

The professional role described in this literature is uniquely suited to the perspectives, understandings, and values of a counseling psychologist (e.g., normative behavior in reaction to expected stressors affecting interpersonal, work, family, and community roles). As counseling psychologists expand their natural professional roles to embrace advocacy and social justice (Vera & Speight, 2003), disaster response is an important undertaking that illustrates how to effectively practice within a social engagement framework. Our purpose with this contribution is to review existing theory, research, policy, and practice of disaster mental health and to make recommendations regarding how counseling psychologists might best intervene in postdisaster and emergency situations on a systemic level. We do not address the clinical treatment of trauma and loss (see Hoffman & Kruczek, 2011), nor do we discuss the curricular implications for counseling psychology training programs (see Bowman & Roysircar, 2011). In order to delineate culturally and psychologically appropriate intervention strategies, it is important to understand as fully as possible the nature and context of human behavior in disaster situations (Dass-Brailsford, 2008). Thus, we emphasize the social ecology of disaster situations integrated with cultural vulnerability theory as a conceptual base for our recommendations (Bronfenbrenner, 1979).

Although our thinking draws from professional and clinical experience as well as the expanding base of empirical studies, we should caution at the outset that there exist, at best, a scattering of controlled investigations of the efficacy of post-disaster interventions (National Institute of Mental Health [NIMH], 2002). There are no studies of postdisaster mental health intervention that meet the "gold standard" of a clinical trial (NIMH, 2002). Thus, we can make few conclusive statements about the most efficacious mental health interventions following a disaster. Even though no unequivocal "empirically valid" or "empirically supported" disaster mental health intervention exists for the variety

of emergency situations we encounter, evidence from studies of other difficult psychosocial situations can be marshaled to provide "empirically informed" or "empirically guided" intervention strategies (Halpern & Tramontin, 2007; Hously & Beutler, 2007). Available evidence, then, can be tentatively applied in disaster situations in culturally appropriate ways until more rigorous investigations can be undertaken. We caution careful use of these assumptions until a clear body of empirical evidence accumulates regarding "best practice" intervention strategies. Several federal agencies are seeding novel research on rapid postdisaster assessment and intervention, emphasizing preplanning followed by after-the-fact evaluation, but it is important to acknowledge that the complexity of disaster situations and the obvious ethical and methodological limitations (North, Pfefferbaum, & Tucker, 2002) raised in conceptualizing studies approximating a clinical trial may ultimately limit the nature of empirical evidence upon which mental health responders must rely.

Phases and Stages of Disasters

As the American Red Cross (ARC) and the Centers for Disease Control (CDC, 2005) have emphasized, no one who experiences a disaster is unaffected. In most cases, responders and care providers are themselves members of the affected community. Catalyzing the reparative responses of the community itself, therefore, is a critical aspect of disaster response (Jacobs, 2007). Thus, we begin with the CDC's perspective on phases and stages of disaster followed by a discussion of the social ecology of disasters and the cultural context in which they occur. Next, we consider the policy guidelines and empirical evidence supporting response strategies and a model of the counseling psychologist's role and therapeutic activities from the perspective of sociocultural ecology. Finally, we briefly address some of the most critical professional and ethical issues in postdisaster intervention. While these documents provide guidance about how to intervene following a disaster, they do not always address cultural or ecological concerns and are very much works in progress that will evolve as we learn more about how to appropriately intervene postdisaster (Goldwater, 2008).

Colleagues, students, and responders alike have found the CDC's (2005) model of the phases of disaster to be helpful in understanding reactions to disaster and interventions to support survivors. While there are certainly other models of disaster situations (see Halpern & Tramontin, 2007), we find the CDC model to be helpful in understanding how disasters unfold. As Figure 1 suggests, a disaster may begin with a predisaster or warning phase, and indeed such a warning can precede a disaster situation by moments or by much longer

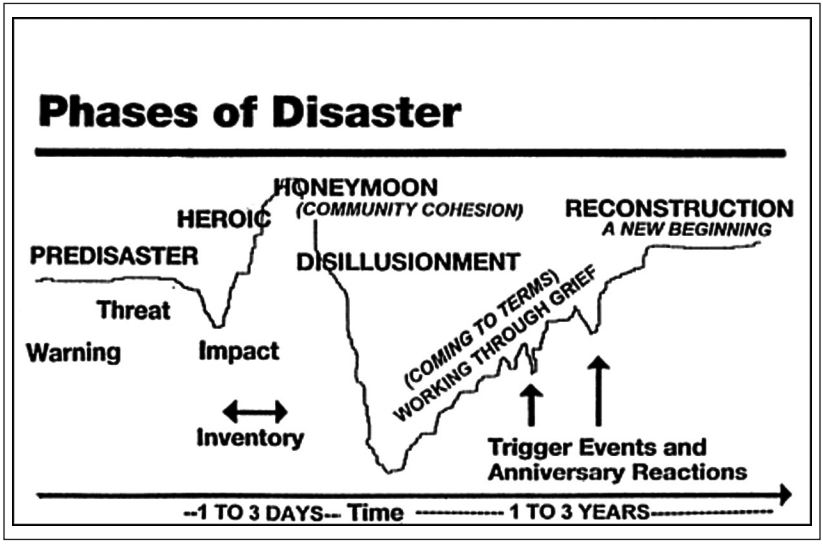

Figure 1. Centers for Disease Control (CDC) Model of Phases of Disaster

periods of ongoing threat (Marshall et al., 2007). This "*warning*" phase is followed by an acute or "*impact*" phase, which can be characterized by heroic responses and then a "*honeymoon*" phase in which altruistic responses and group cohesion are common. In the months that follow, as media coverage subsides, a period of "*disillusionment*" follows that may last for months or for a year or more. Early interventions have typically been defined as being 4 months or less following impact (NIMH, 2002). Clearly, however, some human-caused disasters (e.g., wars) or natural events (e.g., drought/famine) are ongoing and may exert pervasive, detrimental effects for years, and the CDC model may not be as useful in such situations. Experience suggests, however, that disasters of many kinds follow this discernable pattern (see Figure 1) and emerge, develop, and resolve in ways that are reliably seen. The most serious mental health issues, however, often occur in later stages of the CDC model. Longer term disasters invariably interact with, and accentuate, community level damage that further impedes individual and family adjustment. Thus, it becomes important to explore the role of social communities in disaster response. Although the CDC model provides an overarching frame of reference for the evolution of disasters, relief workers, including counseling psychologists, generally intervene during the impact or honeymoon phases when immediate

and pressing crises require clinical intervention. While such responses are a fundamental part of any psychologist's role following disasters, and we briefly review appropriate strategies, many postdisaster situations can benefit from a more comprehensive developmental approach to intervention. Ongoing interventions following disasters that may not have sudden onset, such as drought, famine, and so forth, may not benefit from this CDC model. Furthermore, the CDC model does not emphasize preparedness, which most public health officials now consider to be preeminent (Nelson, Lurie, & Wasserman, 2007). One example of a comprehensive perspective emphasizes the physical and social ecology of disasters.

The Social Ecology of Disasters

Counseling psychologists on the ground should be aware of the social and cultural contexts of individuals and communities in which they are responding. Urie Bronfenbrenner (1979) conceptualized the social environment of communities as a nested ecosystem in which individual elements act synergistically to sustain a larger, more coherent social environment. A biological illustration of such an ecosystem is a coral reef. The biostructure (e.g., salt content, ph, temperature) of a coral reef must be in optimum balance for the reef to thrive and to sustain a diverse array of species. Each element of an ecosystem depends on and interacts with the other elements. Alter any one element, and the remaining elements may adjust within limits, or the ecosystem will be damaged or fail. In a similar fashion, a human community is a sensitive social ecosystem in which multiple elements and layers must remain within certain parameters to favorably support its inhabitants. Bronfenbrenner (1979) considered social and environmental influences beyond the immediate context of the individual *microsystem* (e.g., home, classroom, work place) and studied relations between and among and across microsystems (i.e., the *mesosystem*), as well as events occurring beyond the immediate setting in the *macrosystem* at the neighborhood, community, and global levels. The reciprocal interplay between microsystems and macrosystems was seen as a significant determinant of individual behavior and development.

Social ecologists maintain that it is the "perception" of relations within the social context and the meaning individuals assign to these relations, rather than an "objective" reality that influences the behavior and attitudes of its inhabitants (Bronfenbrenner, 1979). Individuals assume social "roles" or repertoires of behavior influenced by perceptions of the expectations and interactions within their context as well as events occurring within the system. A social ecologist views individual behavior as a complex response to events

within the social ecosystem and reasons that substantive changes in the relations among elements in the system will be more influential and meaningful than changes in any one individual's behavior. Embracing social ecology significantly alters our conception of the counseling psychologist's role and function in disaster situations. Rather than responding exclusively to individuals and families as they adapt to postdisaster environments, an eco-social model presumes that a significant portion of the mental health professionals' efforts will be directed toward restoring natural social and cultural supports in the community. Responders reinforce efforts to restore, and wherever possible to enhance, the unique cultural and social structures of affected individuals and increase the likelihood of optimal and socially just outcomes.

The emerging social justice and multicultural literatures in counseling psychology are both consistent with, and complementary to, an eco-cultural perspective following disasters. The social justice and multicultural emphases that lead counseling psychology emphasize advocacy and policy action at levels beyond the individual, as does Bronfenbrenner. Such systemic models can be utilized to improve the circumstances of marginalized populations while incorporating traditional therapeutic approaches only when they have been adapted appropriately and validated across cultural and economic boundaries (see Constantine, Hage, Kindaichi, & Bryant, 2007; Toporek, Gerstein, Fouad, Roysircar-Sodowsky, & Israel, 2006). Institutionalized oppression, or the exploitation and marginalization of minority communities on a macro-level, exposes disadvantaged communities, increasing their risk for adverse health, psychological, and economic consequences (Israel, 2006). Hurricane Katrina, as an example, disproportionately affected minority communities, low socioeconomic status (SES) families, older adults, and children (Gabe, Falk, McCarthy, & Mason, 2005).

One effective way to both rebuild the social ecology of communities following disasters, and to ensure social justice, is to involve local inhabitants in all efforts at renewal and reconstruction. Training and mobilizing the skills and knowledge of locals as paraprofessionals, and in many cases paid workers, was a highly effective strategy in the aftermath of Hurricane Katrina. Mental health professionals trained and supervised, and in many cases learned from, these individuals as they provided culturally and socially appropriate interventions. An understanding of the culture, norms, and especially the vulnerabilities of the community are essential in ensuring that help in the proper form and amount reaches those most in need. Every attempt must be made to assess needs at the grassroots level, as well as at the infrastructure level, and to appreciate the unique vulnerabilities inherent in the community to which

efforts are being directed. This approach requires substantial change in how counseling psychologists conceptualize their professional roles. Although individual colleagues will vary in their perspectives on how best to expend their professional effort following a disaster, there will invariably be a press to provide practical instrumental and material support despite the need to serve in more consultative and advocacy roles in the interest of social justice.

Cultural vulnerability theory, social justice, and the ecology of disasters. Cultural vulnerability theory provides a complementary contextual framework to social ecology that evolves from community psychology (Harvey, 2007) and a human development perspective (Spencer et al., 2006). Cultural vulnerability theory is based in an eco-cultural understanding of vulnerability and resiliency. Vulnerability is integral to life experiences and defined as "the net experience of risk and protective factors that individuals encounter" (Spencer et al., 2006, p. 628), where risk factors (e.g., lack of resources, transgenerational trauma) exacerbate typical or atypical challenges and protective factors (e.g., familial support, cultural identity) mediate the effects of stress and help individuals overcome these obstacles (Dass-Brailsford, 2008; Tummala-Narra, 2007). Resiliency, on the other hand, is the successful management of both risk (stressors) and protective (strengths) factors (Spencer et al., 2006; Walsh, 2002). As such, resiliency is a multidimensional, transactional phenomena influenced by a complex, dialectical interaction between person and environment (Harvey, 2007). Resiliency focuses simultaneously on one's struggles and abilities to survive and upon the balance between risk and protective factors that determines the level of vulnerability experienced by the individual (Harvey, 2007; Spencer et al., 2006).

Notions of vulnerability and resiliency cannot be considered out of context (Tummala-Narra, 2007). Because levels of vulnerability differ from within as well as between cultures, resiliency and vulnerability need to be examined from multiple perspectives—individual attributes and developmental, communal, and cultural belief systems (Tummala-Narra, 2007). These contextual and cultural forces can mitigate or exacerbate sources of stress (Harvey, 2007), resulting in productive or nonproductive coping (Spencer et al., 2006). In situations of stress and extreme hardship, the meaning of the experience, its relevance, and expressions of agency and resiliency are significantly informed by the cultural mores. Because vulnerability to situations and trauma are imbedded in personal and sociocultural environments, the notion of capacity building (e.g., individual or shared efficacy, individual or communal agency; Tummala-Narra, 2007) needs to be contextualized to reduce dissonance and intervene in a culturally sensitive manner. Counseling psychologists

increasingly employ a social justice framework to address inequities in access to resources, fair treatment, for marginalized groups (Constantine et al., 2007; Toporek et al., 2006).

One of the most significant barriers in culturally appropriate mental health response is language difference, which affect both domestic and international disaster response. Both Dass-Brailsford (2008) and Inman, Yeh, Madan-Bahel, and Nath (2007) have noted that individuals may find comfort in expressing themselves in their native tongue following a disaster. Similar issues were noted in the second authors' work with Tsunami survivors in India. Nonverbal language differences and communication styles may also influence effectiveness of interventions, and further adjustments to established and empirically supported treatments may need to be considered in responding in culturally concordant ways.

Those hardest hit in disasters are often minority groups with few resources (WHO, 2008) (e.g., individuals with preexisting disorders, lower SES Hispanics, or African Americans), and therefore, facility with language and context are vital to effective assistance. Other at-risk populations include children, elders, medically frail individuals, the disabled, pregnant women, mothers with small children, survivors who experienced loss of a loved one or direct gross exposure, and first providers. For example, in recent floods in Texas, the homes closest to the flood areas were typically owned by those of poor Hispanic individuals. Jacobs (2007) noted that indigenous professionals are more effective in the disaster as they are often closely in touch with the needs of the community. Local professionals who understand the culture have the additional advantage of being connected to other support organizations. Outside expertise, therefore, should be utilized primarily to train locals to provide direct psychological assistance or other logistical supports.

Especially among the at-risk populations, cultural mistrust is a continuing problem in disaster response. During Katrina, evacuees expressed concern that if they took aid from FEMA, they would need to repay that aid. Similarly, in Texas, where the first author responded to widespread flooding with the ARC, Hispanic survivors raised the fear that the Red Cross would report illegal status to federal officials—a situation the Red Cross scrupulously avoids. As Dass-Brailsford (2008) noted, many ethnic groups may embrace collectivistic cultural underpinnings. When disaster strikes, the cultural upheaval (Mehl & Pennebaker, 2003) may disrupt formal and informal support networks, the latter being particularly critical to effective coping. This disruption may differentially affect some groups (e.g., elders) more than others, further weakening collectivistic assumptions. For example, following Hurricane Katrina, many social support networks were physically separated, and although

temporary communities were set up (e.g., trailer parks), they potentially did not meet the survivors' social support needs as previous social ties may have. Similar concerns were expressed by South Asian families who lost a family member in the 9/11 tragedy. In the face of such adversity, many survivors have been noted to utilize religious explanations or supports in ways designed to restore just-world beliefs and reduce cognitive dissonance caused by a disaster (Inman et al., 2007).

One example of the increase in concern about cultural (and subcultural) factors in disaster recovery is a new interactive, Web-based Cultural Competency Curriculum for Disaster Preparedness and Crisis Response (CCCDPCR) developed by the office of minority health at DHHS. This training program is now available from the Department of Health and Human Services (DHHS, 2003; https://www.thinkculturalhealth.org/ccdpcr) and is a follow-up to an initial set of guidelines (DHHS, 2003). CCCDPCR focuses on cultural and linguistic competence and "knowledge, awareness, and skills needed to provide emergency health care services to diverse populations during disaster situations" (Goldwater, 2008). CCDPCR should serve as a useful resource for training professionals in culturally appropriate responding.

Our contribution, then, argues for an integrated focus on social ecology and cultural vulnerability as a viable model on which to base mental health interventions following disaster. Applications of this model are useful in the United States in aiding subgroups at risk for longer term and more severe mental health consequences (e.g., low SES groups, the elderly, Hispanic and African American groups, and individuals with preexisting disorders or disabilities), as well as in forming general strategies for disaster intervention in global settings. Although the primary focus of this special issue is on natural disasters and the social and physical ecology, there are implications of this model for understanding the reactions of exposed individuals in other traumatic situations and for understanding how to strengthen mental health treatment generally.

How do individuals react following disasters? Disasters and other emergency situations invariably disturb the deepest values and attitudinal structures of those individuals most directly exposed. Moreover the most vulnerable individuals will invariably be affected most. Furthermore, disasters that involve "intentional violence" as opposed to natural events engender more negative reactions (Schlenger et al., 2002). Several recent empirical studies (Bonanno, Galea, Bucciarelli, & Vlahov, 2006; Mehl & Pennebaker, 2003; Schlenger et al., 2002; Stephens, Hamedani, Markus, Bergsieker, & Eloul, 2009) illuminate likely behaviors following a disaster. Four of these studies are relevant both to an eco-social and a cultural perspective for disaster response, but the

interested reader is referred to the substantial literature now too large to be reviewed in a brief article.

Stephens et al. (2009) in a pair of studies asked 144 relief workers and 317 student and adult "lay observers" to provide three word descriptions of those survivors who evacuated from the Katrina area and those who stayed. Participants then read two vignettes—one about a "leaver" and one about a "stayer"—and were asked whether the survivor's behavior "made sense." Both relief workers and lay observers derogated stayers in both instances as lacking agency compared with leavers despite the reality that many stayers lacked the resources to leave. In the second of the two studies, Stephens et al. interviewed 38 actual leavers and 41 actual stayers and analyzed their responses using grounded theory. Common themes among leavers were "choice," "assessing risk," "future focus," and "fear of loss of independence." Stayers emphasized "strength," "caring for others," "maintaining faith," "connection to others," and "underestimating the hurricane." Thus, although observers agreed in their negative perceptions of stayers, and there were some common factors in both groups (family, home, resources, and fairness), compelling social and cultural rationales for stayers and leavers can be seen as equally agentic. The Stephens et al. (2009) study is important because it both highlights the importance of cultural divergence in the relevance of community factors postdisaster and reveals different ways of coping that are relevant to the determination of intervention strategies following major disasters. The findings from Stephens et al. (2009) are a good example of a way to avoid "blaming the victim" (Lerner, 1980) in explanations of behavior following disasters and raise unanswered questions about how best to understand and assist different subgroups in the aftermath of a disaster.

In a related study, remarkable as much for its fortuitous methodology as for its findings, Mehl and Pennebaker (2003) were conducting a social monitoring study of the everyday interactions of 11 college students prior to and following the events of September 11, 2001. During the 10 days following September 11, participants began by making phone calls and interacting in groups, but over the next several days participants shifted noticeably from group and phone interactions to dyadic interactions. Media interaction fell off sharply after 5 to 6 days. The need for information presumably drove the media and group interaction frequencies, whereas the later dyadic interactions may have provided opportunities to "reaffirm a shaken worldview," reevaluate personal beliefs and opinions, and solidify critical social support networks (Mehl & Pennebaker, 2003). Clearly, such a conclusion is consistent with ecological models and the crucial role of social phenomena and accurate communication and information following disaster (Charuvastra & Cloitre, 2008).

While it is clear that disasters will evoke different responses among different social and cultural subgroups, there is substantial evidence that most individuals will respond with resilience and competent coping given adequate supports (Bonanno et al., 2006; Inman, Yeh, Madan-Bahel, & Nath, 2007). Inman et al.'s (2007) study on the bereavement and coping of South Asian families post-9/11 revealed a strong network among surviving families who served as important supports and sources of resilience for each other. Another study of 2,752 New York residents 6 months following September 11 (Bonanno et al., 2006) found evidence of resilience in more than 65% of respondents, a finding the authors found to be comparable to studies of bereavement. As expected, resilience (0 or 1 PTSD symptom) was greatest among high-income respondents and lowest among historically underrepresented or underserved populations (i.e., African American, Hispanic American, and Asian American). This finding underscores the importance of cultural vulnerability theory and the belief that those individuals with the least resources and support will be the hardest hit following a disaster.

These recent studies are consistent with prior evidence (NIMH, 2002) that suggests that following a disaster, affected individuals will act to secure information about the incident, including information about the extent of damage, the relative risk of exposure, the safety and well-being of loved ones, and the availability of supportive services. Survivors will usually seek out other affected individuals to validate their experience and recalibrate their cognitions, behaviors, and values to maintain consonant beliefs and seek supportive individuals, organizations, services, and resources to rebuild lost or damaged property. Finally, increased cohesion is likely, especially during the Heroic phase (see Figure 1), and survivors will assist others who need help (i.e., altruism; Piliavan & Charng, 1990). During later phases of disillusionment, however, as survivors work through grief, loss, and trauma issues (see Hoffman & Kruczek, 2011), both natural supports and mental health professional support become increasingly critical. These studies make clear, however, that our understanding of individual and group reactions is limited at best. Interventions that promote resiliency and positive coping may work well for privileged groups with access to resources, but for marginalized, oppressed, and vulnerable groups (Constantine et al., 2007), these strategies may, at best, be ineffective or, at worst, may slow or inhibit adaptation.

In spite of these unanswered questions and obvious limitations, the counseling psychologist can perform three vital therapeutic functions in the aftermath of a disaster. The first is the provision of immediate support following the disaster, the second is the restoration of natural supports and services for affected individuals, and the third is to aid all parties and stakeholders in understanding the cultural and social justice implications in consultation with

community partners as they repair and enhance community-level assistance for survivors. The following case illustrates some of the immediate needs of one family, during the Disillusionment phase, (see Figure 1) after they had secured temporary housing and basic needs had been met, but media attention and relief efforts were waning. The case describes the responses of one team of a counseling psychologist and a social worker on the ground and the need for restoration of natural support and follow-up in the aftermath of a disaster.

A Family Copes: A Composite Case Study

A counseling psychologist was deployed as part of a six-person team on the ground following widespread flooding in central Texas. The local area mental health center asked the team to follow up with an adult Mexican American male (age 57) residing in a trailer placed on a home lot. The referral suggested that this client was depressed, and either he or his family (unclear who) made a call to the hotline for mental health assistance. Paired with a social worker, the team knocked on the door of a trailer and a man (Rafael) reported that he and his family (wife, daughter, and son) survived the floods, but their home was deemed uninhabitable. Rafael had just added a family room to his home in anticipation of retirement and had insurance but not flood insurance. The insurance company attributed only half of the loss to flood damage. Although Rafael was appealing the determination, it had been a long process and he was frustrated and angry. FEMA gave him a check for $1,000 and a second check for $600. Rafael used these funds to purchase basic necessities and to pay his mortgage on his now uninhabitable home. He also bought a television and a comfortable chair for the trailer so he could watch football games over the holidays.

Rafael owned his own business prior to the storm and worked hard all of his life to build the business. He planned to sell his business and retire within a few years. The business was destroyed completely by the flooding and had no storm-related insurance. Rafael is, consequently, left with no business, no home, and a life lived in a crowded small trailer that barely fits the four members of his family. The future seems very bleak to Rafael, and he reported deriving comfort only from watching a ball game on television and having a beer.

Rafael's wife, Mara, who is 56 years old, arrived at the trailer a few minutes later. Mara reported that the trailer was on her mother's property, which was initially undamaged by the floods. On the evening after the flooding, the family returned from the shelter to the mother's house grateful to have family

who could take them in and a place where they could be safe and secure. To the family's utter dismay, however, three days after the floods, a fire broke out in the mother's house from wiring that, although not apparent, was damaged by the storm. FEMA moved two trailers onto the property in the mother's driveway. Mara and her family are living in one; the mother in the other.

Prior to the storm, Mara worked for a local retail outlet that was heavily damaged and would take several months to restore. Mara was working hard to ensure that her children were okay, and thankfully, their school would reopen the next week. Mara reported that she would be glad that they could return to their routine, their friends, and their education. She recognized that her husband was not in good shape emotionally, but then, neither was she while her mental and emotional resources had been directed toward caring for her children. Mara was adamant that she did not want to return to work, regardless of whether the outlet reopened because her family needed her. She tried to be supportive of her husband, but privately, she was thinking of taking the children and her mother and moving out of state. She was not sure that she wanted her husband to come along.

The son, Miguel, was 17 years old and a junior in high school. Miguel's school had been closed since the storm. At first, he said the storm was sort of fun, but as time dragged on Miguel reported really missing his friends, his house, and his belongings. Miguel and his sister had to sleep in an upper and lower bunk in the trailer. There was no privacy and no place for Miguel and his friends to be together even when he could manage to connect with them (they have been settled in trailer parks around the city).

Trina is 15 years old and said she was worried about her parents who were arguing constantly. Trina spent as much time as she could with her grandmother in her trailer because it was quieter there and she loved her grandmother very much. Most of Trina's friends were either in trailers elsewhere or were evacuated out of state.

This situation, which could serve as a training role-play, illustrates the usefulness of Counseling Psychology training in postdisaster situations. The team worked at length with Rafael, exploring his feelings and reactions to the flood damage and assessing his mood and affect. The issues raised addressed the broad range of normal functioning: multicultural issues around the importance of a multigenerational family, vocational issues such as Mara's reluctance to return to work and Rafael' loss of his business, educational issues such as Miguel and Trina's return to school, and social and interpersonal issues such as marital conflict, peer relations with Miguel, and so forth. The team worked with the family to formulate a joint plan for addressing their recovery and a referral to the local mental health center for Rafael,

including a review for medication and, possibly, family therapy. Restoring peer support for Miguel and Trina became a priority for the family. In a follow-up visit after the schools were reopened, two team members visited the school where Trina was enrolled to offer assistance in helping students return to normal routines. One specific need was identified—a particular fence at the school had not been rebuilt and was a reminder to students of the storm, and the team engaged a local religious group to reconstruct the fence. This small matter was seen as important by school administrators.

Although this case illustrates an initial intervention and referral to existing resources and involved a variety of issues typical of the work of a counseling psychologist, much of the work done by counseling psychologists in disasters involves providing support to existing mental health professionals, training and supervising locals who can provide appropriate assistance, working with volunteer groups, and insuring articulation and referral among relevant agencies.

Recommended Mental Health Interventions Following Disasters

Although this chapter focuses on intervention postdisaster, advocates and researchers also encourage ongoing community efforts and predisaster planning to combat oppressive environments that leave minority communities vulnerable to ongoing economic and psychological stressors (e.g., Israel, 2006; Santiago-Rivera, Talka, & Tully, 2006). Complex tradeoffs between the provision of immediate psychological support and more systemic intervention, advocacy, consultation, and training, however, complicate the counseling psychologist's decision-making about how professional time and effort can best be expended.

Jacobs (2007) delineated two aspects of the general term "psychological support," defined as assisting ordinary individuals in coping with responses to disaster. The first aspect of psychological support is that set of services provided by mental health professionals and commonly referred to as disaster mental health. A second and equally critical aspect of psychological support is what has been called psychological first aid, a community-based support network provided by friends, neighbors, volunteers, and so forth but not by mental health professionals. In addition to Jacobs's (2007) recommendations, several national and international organizations have issued comprehensive and often overlapping guidelines for professional responses in postdisaster situations (ARC, 2005; National Center for Child Traumatic Stress and National Center for PTSD, 2005; CDC, 2005; Inter-Agency Standing Committee, 2007;

WHO, 2008). These organizations recommend, for the most part, large-scale or macro-systemic interventions designed to restore and, where possible, strengthen community functioning and social support networks. The most recent of these guidelines produced by the Inter-Agency Standing Committee (IASC, 2007) is a complete, ecologically sound, set of guidelines for a comprehensive response following disasters. Developing nations and poor countries often have weaker health systems that may collapse in the face of large-scale disasters (WHO, 2008). The result is that the most damaging long-term consequences of a major disaster are not the deaths resulting directly from the disaster itself but the collateral disease and illness resulting from a health system taxed beyond its capability. Thus, these new guidelines emphasize the restoration and enhancement of community-level structure and functioning that can mitigate longer term health and behavioral consequences of disasters. If they lack anything, these guidelines may not adequately address how best to directly and ethically intervene with individuals and families beyond the provision of immediate and material support.

The IASC guidelines, which represent minimum standards for postdisaster response, emphasize common organizational functions such as coordination monitoring and evaluation and human resources; core mental health and psychosocial supports, such as health and mental services and information dissemination; and social considerations or basic human needs, such as food and shelter. The IASC guidelines are particularly helpful in planning for and mitigating the effects of disasters and in monitoring progress on the provision of individual and community-level assistance.

A thorough, albeit dated, compilation of evidence-based practices for survivors of mass violence (NIMH, 2002) focused more on the provision of direct mental health services. An NIMH conference report reviewed early interventions (within 4 weeks) for evidence of effective outcomes. The principles and findings from that report form a preliminary base for guiding intervention strategies postdisaster. The report emphasized (as did Jacobs, 2007) that professionals should expect normal recovery following a disaster. The NIMH conference report discouraged the presumption that disasters would regularly induce "clinically significant pathology" unless a survivor had a preexisting mental health problem (NIMH, 2002). Participants in this NIMH conference reached consensus and advocated for voluntary participation in early interventions (e.g., psychological first aid, needs assessment, outreach and information dissemination, facilitating natural support networks). The report noted the paucity of randomized, well-controlled studies on which to base their conclusions. Specific conclusions from the NIMH report recommended using brief, focused interventions to reduce distress following disasters.

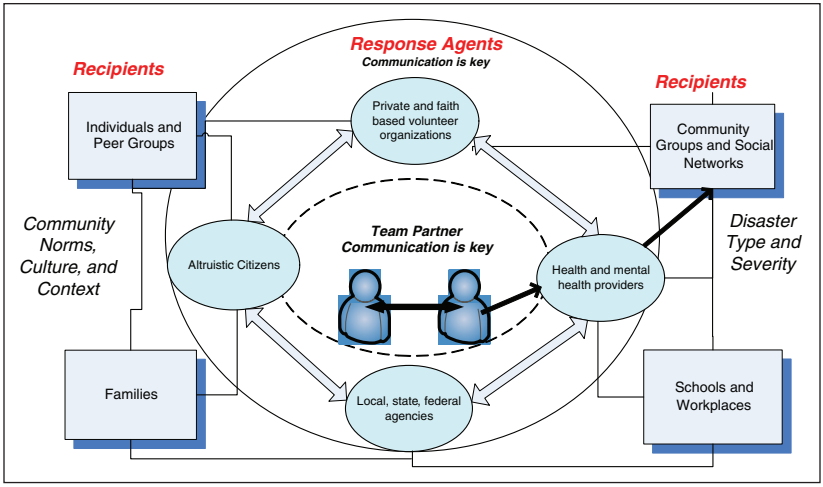

Figure 2. Ecological context, response agents, and recipients when counseling psychologists intervene on the ground following disasters

Cognitive behavioral interventions were supported when used with symptomatic survivors who were not adapting well. The report further recommended careful screening and needs assessment with all exposed individuals and follow-up with high-risk groups (e.g., individuals with preexisting illness) and the use of appropriate referrals.

A Counseling Psychologist's Role Following a Disaster

As Figure 2 indicates, a counseling psychologist intervening as part of a team following a disaster is embedded in a complex network of response agents, a variety of interconnected recipients, and in most cases, a damaged or badly compromised social and physical environment. The need for communication between and among team members, teams, and deploying organizations and between state, federal, and local organizations is, arguably, the most important aspect of the professional role in postdisaster intervention (Gheytanchi et al., 2007). Clear and frequent communication facilitates the restoration of natural social support networks and mental health services. Daily briefings and coordinating meetings between team members and between team leaders and local, state, and federal agencies are strongly encouraged.

The kinds of work counseling psychologists engaged in following Hurricane Katrina. Disasters affect a broad cross-section of populations and affect most daily activities and functioning even for well-adapted individuals. In this respect, the perspectives and understandings of a counseling psychologist are well suited to disaster intervention. Disasters affect vocational roles by frequently producing work displacement, unemployment for periods of time, and in some cases forcing changes in career and life paths or prospects. Disasters challenge coping resources, require increases in decision-making, and almost always adversely affect vulnerable and underserved populations—a social justice issue. Thus, the training, intervention skills, and scientist-practitioner stance of a counseling psychologist are optimal underpinnings for disaster mental health work, especially when viewed from the perspective of social ecology. All of the activities listed below were performed by the authors following Hurricane Katrina. Psychological First Aid (PFA; National Center for Child Traumatic Stress and National Center for PTSD, 2005), which is described in more detail later, is an essential element in each of these interventions, as is planning for a future following the disaster.

Brief, solution-focused counseling
Case management articulation and referral to local health, mental health, and community services
Supportive services and consultation with local health and mental health providers
Practical, material, and instrumental support (e.g., breathing machine for sickle cell child, special baby formula, food distribution)
Vocational counseling and planning
Consultation and support with first responders
Emergency coverage and supplemental support to local mental health agencies
Diffusion of conflict situations in shelters, tent camps, trailer parks, and cruise ships
Door-to-door canvassing (tent and trailer parks) and informal ad hoc discussions with survivors
Accompanying evacuees when returning to their homes
Preparation of psychoeducational resources

Thus, the range and variety of professional activities a counseling psychologist might undertake following a disaster could vary broadly.

Consensus in postdisaster mental health services. Conceptual disagreement remains on the extent to which interventions should be targeted toward individuals in more structured ways such as debriefing (Lange, Lange, & Catabaltica, 2000; Larson & Hoyt, 2007). Whereas the NIMH report cites "some evidence" that one-on-one rehearsal or reimagination of traumatic experiences does not reduce risks and may even retraumatize survivors with high arousal levels (NIMH, 2002), this statement appears to be based on evidence from individual violent trauma such as physical or sexual assault or trauma following a motor vehicle accident or train or plane crash (NIMH, 2002). The reimagining of violent, discrete individual experiences could easily be retraumatizing. As a result, the ARC does not permit the use of critical incident stress debriefing, and other nongovernmental organizations likewise eschew debriefing for all but professional first responders. Some survivors of natural disasters (e.g., floods, hurricanes) may want to tell their stories, some of which include elements of altruism, bravery, and even heroism. There is some evidence that survivors want to retell their stories (Levy, 2008) months or even years later, perhaps to normalize their experiences and to assist in making sense of what has transpired. Any such treatment must be voluntary, and our contention is that efforts toward community-level restoration of social networks and ties (Jacobs, 2007) will probably net the greatest gains for the largest number of individuals. Furthermore, PFA is a minimal, supportive intervention that seeks to provide solace and reinforce positive coping but may be insufficient in more serious cases that may require more aggressive intervention and treatment. We await evidence of sufficient rigor to either support or refute the efficacy of any specific techniques (e.g., PFA, grief counseling, and Critical Incident Stress debriefing). For the present, however, PFA appears to be the consensus strategy for responding postdisaster.

PFA: The consensus early intervention. National Center for Child Traumatic Stress and National Center for PTSD (2005) outlined a broadly applicable strategy for postdisaster intervention designed to reduce distress caused by traumatic events and promote adaptive psychological functioning. PFA establishes a "non-intrusive" but physically and emotionally supportive and culturally and developmentally appropriate environment designed to connect survivors to natural social supports, provide information, and promote positive psychological coping (National Center for Child Traumatic Stress and National Center for PTSD, 2005). PFA can be administered by mental health specialists across a variety of first response and disaster relief settings (Vernberg et al., 2008).

The objectives of PFA are very clearly and carefully detailed in a Field Operations Guide (National Center for Child Traumatic Stress and National

Center for PTSD, 2005) and include (a) establishing a human connection, (b) enhancing safety and comfort, (c) stabilizing or calming emotionality, (d) offering practical assistance, (e) connecting families, (f) promoting positive coping, (g) providing information, and (h) linking to services (National Center for Child Traumatic Stress and National Center for PTSD, 2005). PFA is normally delivered within the context of a sanctioned disaster response system, within the scope of the provider's expertise, and with cultural sensitivity. PFA involves providing calm, straightforward listening, acknowledgement of positive coping, and accurate information provision that reduces distress, assists with immediate needs, utilizes physical presence in a reassuring way, and avoids pathologizing an unsupported opinion. (National Center for Child Traumatic Stress and National Center for PTSD, 2005) also provides possible questions to ask when providing PFA. For example, when initiating contact, say:

> "Hello. My name is _____. I work with _____ (show ID). We're checking in on people to see how they are doing. Is it okay that we speak?"

In dealing with concerns about the safety of or separation from loved ones, ask:

> "Are you worried about anyone close to you right now? Do you know where they are?"

A reading of this excellent guide is essential for disaster relief workers and the development and uses of the Guide are very carefully described in Vernberg et al. (2008). The specific and carefully manualized approach to PFA in Vernberg et al. (2008) can be easily learned by a variety of lay and professional disaster response personnel and is adaptable across many social groups. Again, however, we caution that hard evidence of the efficacy and effectiveness of PFA is lacking. Although PFA is the consensus, early approach to mental health assistance, individuals with direct and more intensive exposure to disaster circumstances, and those who do not readily recover may need more exhaustive psychological intervention and referral. Such interventions are appropriate to, and consistent with, the training of a counseling psychologist. Furthermore, PFA presumes that survivors have adequate resources to act in resilient and effective ways when given modest support and assistance. Whether such approaches will be effective in mitigating future problems for those marginalized or underserved groups without

Table 1. Exposure Extent, Underlying Survivor Concerns and Needs, and Potential Interventions Following Disasters

Exposure Extent	Underlying Survivor Concerns/Needs	Potential Interventions
Full, direct exposure to disaster	Personal safety and comfort	Rescue, shelter, practical assistance, restore community support networks
Full, direct exposure to disaster	Restoration of social support	Reconnect to family and natural social supports
Indirect exposure	Anxiety, fear	PFA, provide emotional stabilization
Indirect exposure	Disorientation, loss of agency	PFA, promote planning, enhance coping
Limited peripheral exposure	Concern about possible threat/harm	Provide accurate information
Vicarious exposure	Need to restore beliefs, reduce dissonance	Provide opportunities to assist others

Note: Each cell in the above table presumes fulfillment of the cell above it.

access to resources remains to be seen. Furthermore, the direct and emergent treatment of more extensive trauma is not addressed here but is addressed in Hoffman and Kruczek (2011).

As a general guide to potential responses at various levels of disaster exposure, Table 1 is our summary of the underlying health and mental health risks and possible interventions a counseling psychologist might undertake. As Table 1 suggests, as exposure increases, different intervention strategies may be needed when risks are greater and when exposure is more severe. Thus, some manner of initial assessment by the counseling psychologist of the degree of exposure and the cultural considerations at the community level are useful in determining how to proceed therapeutically.

Figure 2, drawn from our experiences in working in teams and with partners in disaster situations, illustrates the ecological context in which the counseling psychologist operates following disasters. Mental health responders frequently provide support to other first responders, consult with local and regional authorities, and advocate for socially just and culturally appropriate recovery strategies. Anticipating, acknowledging, and understanding the embeddedness of the work of disaster mental health services is fundamental to the success of any services provided. Clear and consistent communication among

stakeholders in a community following a disaster may well be the most critical aspect of restorative interventions at any level. The sweeping document addressing WHO's capacity in emergency situations (WHO, 2008) emphasizes health and mental health–related communications as a critical element in response capacity.

In sum, the background and professional preparation of a counseling psychologist is ideal as an underpinning for ecologically based, culturally appropriate responses following a variety of natural and human-made disasters. The remainder of this article discusses some of the unique exposures, pitfalls, professional benefits, and practical considerations facing the counseling psychologist who engages in disaster mental health response.

Benefits, Risks, and Professional Issues in Disaster Relief Services

Colleagues who serve in postdisaster situations typically comment on how different their professional role is compared with the role they fill in traditional settings (Jones, Immel, Moore, & Hadder, 2008; Levy, 2008). Among the issues raised are the informality of the professional role and activities; the need to move into the field quickly and effectively; the need for coordination, communication, and extensive referrals; and the need to be careful to guard one's own mental state and protect against burnout in the face of widespread pain and grief (Jones et al., 2008). These differing roles have both positive and negative consequences and require sometimes conflicting accommodations.

Professional compassion fatigue, vicarious trauma, self-care, and safety. Mental health professionals who provide services following disasters often do so for value-based reasons, such as altruism, empathy, and restoration of their own sense of a just world (Lerner, 1980). In many cases, these colleagues view their contributions as significant, important, and beneficial to their fellow citizens (Edelson, D'Alessio, & Edelson, 2003). Our experience is that despite the intensity, long hours, and decreased physical comforts, colleagues who do such work gain personal and professional benefit from their work. The magnitude and impact of trauma, however, also expose disaster mental health workers to professional burnout, which can be heightened by the secondary effects of time spent in a disaster-torn community. Some evidence suggests that providing services to disaster survivors may produce "subclinical" versions of the mental health problems encountered in the individuals they treat (Edelson et al., 2003), resulting in lasting changes in the providers themselves. In every one of the first author's disaster deployments, at least one mental health volunteer had to return home, either because the team leader determined serious

burnout or the individuals themselves recognized impairment. Burnout was particularly evident among volunteers who served multiple deployments with minimal time off between deployments. Managing stress (Jones et al., 2008) and, in particular, seeking and receiving support from team members and the team leader, is crucial, as is periodic rest and time off during a deployment. Team leaders should be attentive and responsive to the possibility of compassion fatigue and take appropriate steps (e.g., daily debriefing/processing meetings) to attenuate fatigue so that it does not affect judgment and safety of disaster workers (Aten, Madson, Rice, & Chamberlain, 2008). All levels of professional workers and volunteers can be at risk for burnout, and some may have to be reminded by a team leader of the importance of time off during a deployment. As counseling psychologists, we can provide ongoing social support and encourage other responders to engage in appropriate self-care and continuous communication.

Effective interaction with all parties in disaster work is in some respects similar to effective interaction in typical professional practice and in important ways is quite different. For example, providers must be especially careful to respond with firmness when dealing with clients who, in the face of the elevated stress in the immediate aftermath of a disaster, may become overtly hostile or aggressive. In addition, and perhaps similar to other kinds of professional practice, support from police, fire, and other first responders may be critical. There can be instances, in the authors' experiences, wherein empathic responding and/or PFA are ineffective or even counterproductive and which hostile clients may endanger self or others (e.g., family, providers, onlookers). One such case involved a victim of a residential fire who blamed a family member for starting the fire and became assaultive. Collaborative intervention from police and firefighters was essential to a resolution of this conflict. Finally, the behavior of disaster health and mental health workers is visible to the public, and their conduct in public settings should model the skills and interactions they hope to encourage among survivors. As an example, one mental health worker was eating lunch in a local restaurant and was approached by a local resident for advice on a recovery issue. The mental health worker who was both wearing an identity badge and a uniformed shirt responded in a curt and discourteous manner indicating that she was "on lunch break" and could not be expected to respond. The incident damaged the relationship between local residents and relief workers, and the resident, appropriately, reported the incident to the agency level.

Issues of privilege and social justice for the professional responding following a disaster. As we have indicated, responders themselves may face not only secondary or vicarious trauma (Edelson et al., 2003; Jones et al., 2008) but also the

consequences of being a privileged responder who must witness, empathize, and respond to the consequences of disasters for oppressed or disadvantaged groups. We agree with Constantine et al. (2007) in underscoring the importance of awareness of how one's own power and privilege will affect a provider's behavior in responding to obviously disadvantaged survivors. As Stephens et al. (2009) discovered, attributing negative outcomes, or reacting to, or pathologizing behavior of oppressed survivors is a concern for all first and health responders. Reflection on issues of power and privilege and awareness of operative indigenous or faith-based healing processes as well as consultation and supervision with colleagues and local stakeholders is critical in determining how and when to intervene and how to understand the processes and outcomes involved in these interventions. Attending to these issues while still following protocol and agency procedure is a constant challenge for responders.

Protocol, licensure, informed consent, and supervision/consultation. Besides dealing with effective interpersonal communication, potential burnout, and complex decisions about how to intervene optimally, disaster mental health workers must be cognizant of differences in protocol and procedures, goals and objectives endorsed by different deploying organizations. Following rigid protocol can be particularly difficult for experienced clinicians who may feel that the services they can deliver in a disaster are too brief, or insufficient, or for whom the unclear intervention contexts may be uncomfortable. To illustrate a few protocol issues, responders are mandated to respond in teams or pairs rather than alone or in isolation, different from the office practice in significant ways. Appropriate identification should always be carried and shown to the client. Furthermore, while responders can take active steps to encourage referral, no reliable referral agencies may be available. As a pragmatic example of protocol issues, giving a survivor a ride in an agency car is prohibited when working for SAMHSA. Such illustrations underscore the need to follow agency protocol in disaster situations. Finally, a given provider may not agree with the agency protocol or may believe that the protocol is either culturally or therapeutically inadvisable. Resolutions of protocol conflicts are important but can contribute to provider stress.

Licensure issues may also raise concerns. Disaster mental health workers, when working as a volunteer for the Red Cross, state government, or Department of Health and Human Services, may not be licensed to practice in the jurisdiction in which they are located. Typically, temporary licenses are granted for the deployment period, which are then not valid afterward. Thus, the guidelines of the deploying agency may take precedence over professional guidelines in the professional's home state. Whereas most conscientious providers are

careful to provide follow-through and access for clients either to an office telephone number or an emergency number, local mental health resources are typically badly strained following disasters and follow-through may be impossible. Mental health workers are advised to communicate with clients only through agency-provided communication devices (e.g., satellite phones, agency cell phones), rather than their own cell phones. In the authors' experience, some providers who had no access to agency cell phones used personal cell phones and found that survivors called them weeks or months after their return to their home states. Clients, therefore, should not have access to a professional from another state after the deployment, as that professional may no longer be licensed to practice in the state in which they served. While seemingly simple, such considerations may be overlooked by inexperienced responders.

Disaster response also differs from clinical practice in the nature of informed consent. In traditional clinical practice, clients sign an informed consent document detailing treatments, fees, payment, missed sessions, and confidentiality (among other details). Informed consent during disasters is possible, though limited forms are in use in some settings, especially where information about the client is to be shared with a public agency or a referral is necessary. Because disaster workers frequently see clients in their homes, shelters, or makeshift clinics, disaster workers are advised always to work in teams of two or more—never seeing a client alone for safety and professional reasons. Nonetheless, disaster mental health workers should make every attempt to be clear, appropriate, and ethical in interactions with clients and to make as clear as possible the nature and purpose of their interventions. As disaster mental health matures as a specialty, informed consent practices may evolve as well (Collogan, Tuma, Dolan-Sewell, & Borja, 2004; NIMH, 2010).

Supervision issues are significantly complicated in postdisaster situations. Supervision is typically conducted informally by team leaders, some of whom may not be licensed psychologists and who may be social workers, counselors, or nurses. Consultation with supervisors and other team members, though essential to the resolution of the complex clinical, ethical, and legal issues faced in disaster mental health, may either not be available or available only by phone or after the fact in team debriefings. One contribution does address supervision issues in postdisaster response directly. Aten et al. (2008) recommend that supervisors (a) model self-care, (b) acknowledge the effects of disaster exposure but still maintain boundaries, (c) encourage self-care plans and monitor progress, and (d) monitor providers closely.

Consultation with local health and mental health professionals is critical following disasters in providing culturally and socially appropriate interventions (Aguilera & Planchon, 1995). Furthermore, communication among team members and consultation during treatment and/or ethical dilemmas is vital to effective intervention, as is communication with agencies as depicted in Figure 2 and in Gheytanchi et al. (2007).

Clinical and role issues (transference and countertransference, preexisting mental illness, referral, records, and follow-up). The professional context and parameters in disaster work are very different from those in traditional clinical practice (Halpern & Tramontin, 2007). Perhaps the most obvious difference between traditional mental health work and disaster work is the breadth and kind of activities in which the professional engages. Postdisaster interventions are generally very brief (one estimate indicates less than 10 minutes; Aguilera & Planchon, 1995). Depending on the setting and context in which a disaster professional is assigned, there may be a more traditional role of treatment and referral, or a much broader role of informal support or psychological first aid while distributing food, clothing, or supplies, or even supportive discussions while having lunch in a local restaurant. Boundaries, therefore, are frequently more fluid and difficult to establish. Furthermore, the extent of loss and pain following a disaster is substantial, thus engendering powerful interactions between clients and professionals. Staffing support, debriefing for mental health providers, and referrals for ongoing care for clients are important response components.

Referral is greatly complicated by interruption of existing mental health services. Since mental health professionals are often also residents affected by a disaster, agency, hospital, and other mental health services may be sharply curtailed or unavailable (Wang et al., 2008). If a building in the disaster impact zone has been affected, services may be moved to alternate locations or temporary clinics, and available services may be compromised for months or even years following a major disaster. Wang et al. found that 23% of individuals affected by a disaster experienced a reduction of mental health services and those who did receive treatment were seen by general medical services rather than specialized mental health facilities. There is also a need for special needs facilities for individuals with preexisting mental health problems who may not be served well in typical shelter environments. Well-meaning deployment organizations may provide immediate health and mental health services that can supplant existing sources but unintentionally reduce the likelihood that naturally existing resources will be reestablished. The result, of this emergency care provision, can sometimes be the reduction

of health and mental health services available in the long run, for example when a physician or mental health provider chooses to leave the area because their normal source of client load is being handled in emergency facilities.

Summary and Future Directions

Disaster relief work requires multiple intervention strategies well suited to the theoretical, empirical, and practical background of counseling psychologists. The eco-cultural focus in this contribution emphasizes the importance of macrolevel interaction between individuals and their community. Furthermore, we raise questions regarding how to honor a commitment to multicultural issues and social justice in effective responses in the aftermath of disasters. Disaster mental health interventions such as PFA emphasize the establishment of positive coping skills and psychological strengths, territory quite familiar to the counseling psychologist who works in traditional practice. How best to intervene at the system level and advocate for social justice while still responding to immediate clinical concerns remains as a question. The status, validity, and efficacy of various guidelines and protocols provided by local, regional, national, and international entities is a concern requiring further study.

Counseling psychologists receive unique training in issues particularly relevant to the consequences of unforeseen disasters, including vocational counseling, strength-based counseling approaches, and varied modalities of treatment, including group and family counseling, consultation, and prevention. Counseling psychologists can use this training in thoughtful ways to enhance disaster relief practice and research efforts. While methodologically and ethically difficult, rigorous empirical evaluation of disaster mental health efforts is an urgent priority. This includes examination of the culturally appropriate intervention efforts in various communities. The ethical and methodological issues in disaster research are probably best addressed by incorporating rigorous data collection in preplanning efforts and building the research infrastructure needed to design and implement more rigorous studies in the aftermath of disasters (North et al., 2002). Resources such as the National Library of Medicine's Disaster Information Management Research Center (National Library of Medicine, 2010) and NIMH's (2010) guidelines for disaster research are steps in the right direction. These documents emphasize informed consent issues, vulnerability, risks and benefits to participants, safety issues, and community input. Progress on these issues may involve local, federal, and international legislation and advocacy. Additionally, preventive social justice initiatives in underserved communities should be included as an aspect of disaster mental health work since these programs could buffer against the eco-cultural impact of disaster. Finally, training programs should include

training for disaster mental health within undergraduate and graduate training curricula (see Bowman & Roysircar, 2011).

How Can You Become Involved in Disaster Response?

The two senior authors became involved largely through the Katrina Assistance Project, a joint effort between federal agencies and national mental health associations (e.g., American Psychological Association [APA], ACA, NASW). This effort was funded by FEMA, administered by the Substance Abuse and Mental Health Services Administration (SAMHSA), the lead agency at the U.S. Department of Health Services (DHHS). In order to reinforce state and local mental health personnel to respond to Katrina, outside contractors or volunteers (e.g., licensed psychologists, psychiatrists, social workers, mental health counselors, psychiatric nurses) were granted interim licensure in Mississippi and Louisiana and contracted in teams to provide supplemental services. Lehigh University then provided funding for further participation by faculty and students following the APA convention in New Orleans. There are many other ways to become involved in disaster mental health services. The ARC offers an online orientation course and a variety of training courses, including International Disaster Services, most at no cost to mental health professionals. In addition, Doctors Without Borders, UN Habitat, the WHO, and other international and national nongovernmental organizations (NGOs) offer volunteer and career opportunities for mental health professionals. More than 2,000 psychologists have volunteered through APA's Disaster Response Network (DRN) following wildfires, ice storms, floods, and most recently in aiding returning survivors from Haiti (APA, 2007), and resources are available from a new online network (APA, 2010). Training opportunities are also available through several professional associations (see http://www.apa.org/releases/disasteropps.html; www .counseling.org), private consulting organizations, and university training programs, which offer training and coursework in disaster response. In addition, many states' local municipalities now maintain lists of volunteer mental health professionals who can deploy in emergency situations. Finally, it is our sincere hope that counseling psychologists will make significant contributions to the design, implementation, evaluation, and ethical issues in disaster research studies. Our perspectives are relevant and our input is both valued and needed.

As of this writing, the relief efforts following the earthquakes in Haiti and Chile remind us of the critical importance of training efforts and the need for outcome and process research on disaster mental health interventions across social and cultural groups, work that counseling psychologists can and should undertake.

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