Meaning Making in the Context of Disasters

Crystal L. Park

University of Connecticut

Objective: Understanding the factors underlying adaptive psychological responses and recovery after disasters has important implications for intervention and prevention efforts. To date, little attention has been paid to successful coping processes in recovering from natural and technological disasters. This article takes a meaning making perspective to explicate how survivors successfully adapt after disasters. Method: Relevant literature is reviewed to illustrate the process of adaptation and resilience after disasters. Results: Studies to date suggest both survivors’ global meaning, particularly their religiousness and sense of meaning, and their appraisals and meaning making after the disaster are important influences on their postdisaster resilience. Meanings made in the form of changes in global beliefs and perceived growth have been reported and shown to have inconsistent relations with adjustment. Conclusions: Although much more research is needed, current literature suggests that meaning making processes are central to recovery and resilience after a range of disasters. © 2016 Wiley Periodicals, Inc. J. Clin. Psychol. 72:1234–1246, 2016.

Keywords: adjustment; trauma; positive psychology; Posttraumatic stress disorder; disasters

Much recent research on posttraumatic coping and recovery has focused on resilience after intentional community-wide traumas such as war and terrorist attacks (e.g., Butler et al., 2009). This research provides critical information regarding the factors that can lead to better adaptation posttrauma. However, resilient responses and recovery after another category of traumatic events—natural (e.g., flood, hurricane) and technological (e.g., oil spills, fires) disasters—has received relatively little attention (Schulenberg, 2016).

Like terrorist attacks, disasters affect whole communities, but unlike them, disasters are not intentionally inflicted by other human beings. Combined, these two aspects—the broad community effect and the nonintentionality—present a unique set of circumstances for survivors of disasters. Disasters vary on many dimensions, including their scope and the extent of subsequent loss, devastation, and displacement (Norris et al., 2002). By definition, however, all disasters are sudden and catastrophic, and survivors often experience substantial symptoms of distress and psychosocial disruption (Norris et al., 2002). Posttraumatic stress symptoms or disorder (PTSD), along with heightened symptoms of depression, anxiety, and somatic complaints, and excessive alcohol use have been consistently demonstrated, particularly after large-scale disasters. Uncertainty, distrust, and anger are common after disasters in which people perceive some element of human responsibility (Norris et al., 2002).

Importantly, however, levels of recovery and resilience after disasters are impressively high (Bonanno, Brewin, Kaniasty, & La Grea, 2010). After Hurricane Ike, only 8.3% of an exposed sample reported symptoms that met criteria for hurricane-related PTSD and only 20.6% had one or more of the following suicidality, alcohol abuse, depression, or panic disorder (Pietrzak et al., 2012). Even after the extreme devastation of Hurricane Katrina, the incidence of PTSD in survivors was 22% (Galea, Tracy, Norris, & Coffey, 2008). This human capacity to recover and even thrive postdisaster warrants attention: Understanding how individuals best manage and recover from disasters may usefully inform postdisaster interventions and perhaps even the implementation of predisaster prevention-focused and resilience programs (Park & Slattery, 2014). This article takes a meaning making perspective and reviews relevant literature to explicate recovery and resilience after disasters. Although a rigorous systematic review is beyond the scope
of this overview, efforts were made to include studies that examined any aspect of the meaning making model in the context of disaster, broadly defined.

The Meaning-Making Model

The meaning-making model is a useful framework for conceptualizing processes of coping and recovery after stressful events. The model focuses on two levels of meaning: global and situational. Global meaning encompasses people’s fundamental beliefs–about themselves, the world, their place in the world, and their sense of meaning and purpose–as well as their unique hierarchies of goals and values.

Situational meaning refers to how global meaning, along with the context of a particular situation, influences one’s interpretation and subsequent reactions to that situation. Specifically, situational meaning encompasses the meanings assigned to these experiences, the potential discrepancies between global and appraised meaning, the processes involved in reconciling those discrepancies (termed “meaning making”), and the changes resulting from these reconciliation processes (termed “meaning made”). See Figure 1 for a graphic depiction of this model.

People appraise or assign meanings to situations to understand their personal significance (Lazarus & Folkman, 1984). These appraised meanings are largely informed by individuals’ global meaning in combination with the specific details of a given particular situation. For example, those with a strong sense that stressful situations are amenable to change may focus on determining which aspects can be modified, while someone who believes that events are distributed fairly might seek to identify what prior mistake or offense he or she committed to deserve the present adversity.

Causal attributions, one’s understanding of why a given event occurred, are an important type of event appraisal. Attributions can be naturalistic or supernatural or religious. For example, naturalistic explanations for the occurrence of a severe car wreck may involve weather, driver inattention, or road conditions, while religious attributions may include God’s efforts to teach, challenge, or punish the afflicted or to teach a lesson to others (Spilka, Hood, Hunsberger, & Gorsuch, 2003). Individuals often make naturalistic attributions for the immediate or proximal cause of an event but also invoke religious or metaphysical explanations for the more distal, metaphysical cause (see Park & Folkman, 1997).

After initially appraising the meaning of an event, individuals determine the extent to which that meaning is congruent with their global views of the world and themselves and their desires and goals. Traumatic events may violate or even “shatter” global beliefs about the world and themselves and their overarching goals. Such violations or discrepancies may initiate cognitive and emotional processing efforts–meaning making–to rebuild their meaning systems in a way
that accounts for the reality of the trauma (Park & Folkman, 1997). People make meaning in many different ways, attempting to change their appraised meaning of the stressor to make it less aversive or minimize its effect or change their global beliefs and goals to accommodate the experience. Meaning making may also entail revising their sense of their lives as meaningful or purposeful. Other meaning-making processes may be less effortful, experienced as intrusive thoughts or dreams (see Park, 2010, for a review). These processes of assimilation and accommodation have been described in theories of cognitive and emotional processing (see Park, 2010, for a review).

Meaning-making processes may result in a variety of changes in situational or global meaning, including changes in appraisals of a stressful event (e.g., coming to see it in a more positive light), changes in global meaning (e.g., changing one’s global beliefs, spiritual or religious values, or overarching life goals), and perceived stress-related or posttraumatic growth (e.g., perceived increased appreciation for life, stronger connections with family and friends, or greater awareness of one’s strengths; Park, 2009). All of these changes resulting from meaning making are instances of meanings made. Successfully making meaning reduces perceived discrepancies between appraised and global meanings and restores a sense that the world is meaningful and one’s life is worthwhile.

Meaning Making After Disasters

The meaning-making model has been applied to a variety of highly stressful or traumatic events, including illnesses, bereavement, terrorist attacks, and combat (Park, 2010). Although it has not explicitly been used as a framework to review recovery and resilience in the aftermath of disasters, its relevance is clear: Disasters are extremely challenging events, often with many lasting psychological and practical sequelae, and recovery can be a long and hard-fought struggle. Disasters’ devastating effects on myriad aspects of survivors’ lives, livelihood, family, home, and community will almost certainly violate their ordinary ways of understanding the world and the goals and ways of life that they were pursuing prior to the disaster. Thus, meaning-making processes are likely to play critical roles throughout survivors’ recovery. Figure 2 provides a hypothetical example of the model applied to making meaning of an earthquake.

Global Meaning and Disasters

Research has examined relations between a range of global beliefs and individuals’ responses to and recovery from disasters. Some global beliefs that have been shown to relate to well-being in more general (nonstressed) samples have been studied in the aftermath of disasters.
For example, in a sample of German flood victims, having a sense of personal belief in a just world—a belief that the universe metes out negative events in a predictable and fair way—was associated with lower levels of anxiety, depression, and general psychological distress (but not PTSD symptomatology), a pattern that persisted when age, sex, substantial stressors, and losses caused by the flood were statistically controlled (Otto, Boos, Dalbert, Schöps, & Hoyer, 2006).

Similarly, high levels of beliefs in one’s ability to cope with the disaster (self-efficacy) were associated with lower levels of general distress and avoidance in a sample of survivors of the Mar-mara earthquake in Turkey (SUMER, Karanci, Berument, & Guner, 2005) and with lower PTSD symptom levels in a sample of Hurricane Katrina survivors (Hirschel & Schulenberg, 2009). Survivors of the Sri Lankan tsunami who had a generally pessimistic explanatory style (perceiving negative events as having external, stable, and global causes) had more PTSD symptoms and poorer health (Levy, Slade, & Ranasinghe, 2009).

These studies suggest that holding global beliefs in a world that is controllable and fair and that one can competently handle the disaster can be adaptive even in extremely stressful circumstances. Such beliefs may allow survivors to feel more agency and thus cope more effectively with the difficulties posed by the disaster. Studies have not examined these mediational linkages, although a finding of inverse relations between earthquake survivors’ self-efficacy and avoidance (an aspect of PTSD) is consistent with this notion (SUMER et al., 2005).

Purpose in life is a strong correlate of postdisaster resilience. In survivors of the 2005 Pakistan earthquake, nearly two thirds of whom met criteria for likely PTSD, purpose in life was associated with lower PTSD symptom levels and higher positive emotions (Feder et al., 2013), and in individuals seeking clinical services after the Gulf Oil Spill, having a strong sense of purpose in life was highly correlated with life satisfaction (Drescher et al., 2012). In a prospective study of mostly non-Hispanic Black low-income mothers living in the New Orleans area, purpose in life assessed 1 year prior to Hurricane Katrina predicted perceived posttraumatic growth—but not PTSD—1 and 2 years after the hurricane (LOWE, Manove, & Rhodes, 2013). All of these samples comprised survivors experiencing subjective postdisaster distress, and it appears that their ability to maintain a sense that their lives mattered, that they had valuable goals to accomplish, may have allowed them to persevere and to find sustenance in the midst of catastrophic circumstances (Iacoviello & Charney, 2014). The prospective study of Katrina survivors, however, suggests that a sense of purpose may not project forward in a protective fashion in terms of distress; concurrent assessments of purpose and distress may have yielded different findings.

Religiousness and spirituality have also been implicated in disaster recovery. In a sample of survivors of the 2005 Pakistani earthquake 3 years afterwards, being “religious minded” was independently related to lower PTSD symptoms after controlling for many disaster-related and demographic variables (Ali, Farooq, Bhatti, & Kuroiwa, 2012), suggesting a salutary effect of a global religious life. However, some types of religiousness and spirituality are related to poorer recovery. In a sample of Sri Lankan survivors 6 months after the 2004 Asian Tsunami, belief in karma was associated with poor health, although not with PTSD symptoms (LEVY et al., 2009). Still other studies found no relationship between religiousness and spirituality and postdisaster adjustment, such as that of a large sample of college students in the areas affected by Hurricanes Katrina and Rita in 2005, for whom religiousness was unrelated to trauma symptoms (Pecchioni, Edwards, & Grey, 2011).

In a study of people who had experienced the L’Aquila (Italy) Earthquake, survivors high in religiosity and low in spirituality had the lowest levels of PTSD symptomatology, but spirituality was related to higher levels of symptomatology (Stratta et al., 2013), suggesting a protective value for organizational and ritual aspects of religiousness but a potential liability for spirituality per se. Further, in that sample, spiritual struggle, but not other aspects of religiousness or spirituality, were related to higher levels of PTSD symptomatology and suicidality (Stratta et al., 2012). Finally, another analysis of the prospective data collected from low-income mothers after Hurricane Katrina (described above) found that predisaster religiousness did not have a direct effect on postdisaster distress, although it was predictive of less postdisaster distress through a heightened sense of purpose and optimism (Chan, Rhodes & Perez, 2012).

These complex findings are somewhat difficult to interpret; nearly all studies assessed global beliefs after the disaster. As will be discussed below, global meaning, particularly religiousness
and spirituality, may shift after traumatic experiences, and predisaster levels versus postdisaster levels of these variables may have different relations with postdisaster adjustment, a question unaddressed in the disaster literature. Further, predisaster global religiousness and spirituality may lead to religious meaning making (Wadsworth, Santiago, & Einhorn, 2009), a topic that has received considerable research attention and that is described below.

Situational Meaning of Disasters

Appraisals of the disaster. According to the meaning-making model, myriad aspects of survivors’ appraised meanings of the disaster will influence their perceptions of violations of global meaning and subsequent distress. For example, among bereaved family members and close friends who perished in the Mount Saint Helens volcanic eruption, appraisals of the death as preventable predicted increased distress at 1 and 3 years after the eruption (Chenell & Murphy, 1992). A study of survivors 3 months after the 2011 Japanese earthquake, tsunami, and nuclear disaster found that appraisals of harm and threat were related to more distress and lower quality of life, while challenge appraisals were related to less distress and higher perceptions of growth from the disaster and quality of life (Kyutoku et al., 2012).

Similarly, appraisals of threat, harm, and low control were related to depression, anxiety, and PTSD symptoms in survivors of the Perth Flood (Morgan, Matthews, & Winton, 1995), and in survivors of the 2008 Wenchuan (China) Earthquake, perceived safety 5 weeks after the earthquake was related to lower PTSD symptoms (Cai, Ding, Tang, Wu, & Yang, 2014). These findings are similar to the larger literature on appraisals of stressors, that perceiving the event as threatening and low in control are distressing, while perceiving the event as low threat and high challenge relates to lower levels of distress. Further, appraisals of high challenge and low threat have been shown in the broader coping literature to be related to more active and engaged coping (Aldwin, 2007); research specifically in the context of disasters has not studied the effect of appraisals on subsequent coping.

Much of the research on postdisaster situational appraisals and recovery has focused on attributions. Unlike traumatic events that are intentionally inflicted, natural disasters have no perpetrator. Intentionality is a difficult fact to incorporate into one’s meaning system (i.e., the knowledge that people will intentionally inflict terrible harm upon me) and is related to higher incidence of PTSD (Santiago et al., 2013). However, because of their nonintentional nature, natural disasters create a gap in one’s understanding of why such a devastating event occurred. Thus, by definition, natural disasters are typically considered “acts of God” (Steinberg, 2000). Technological disasters may lie in more of an attributional gray area, because although they may not have been deliberately caused, survivors may be more likely to perceive elements of human negligence or lack of planning in creating the conditions that led to disaster or in exacerbating its negative effects (Blocker & Sherkat, 1992; Kumagi, Edwards, & Carroll, 2006).

Gaps in understanding why disasters occur may account for the fact that religious attributions—and subsequent religious coping—are particularly common after disasters. Indeed, the literature has demonstrated that religious attributions are frequently made after disasters. For example, a study of two major natural disasters—Hurricane Katrina in 2005 and the Chilean earthquake in 2010—found that describing the disasters as an act of God was among the most common explanations. Further, the more that survivors encountered extreme hardship—unpredictable, disruptive, and uncontrollable experiences—the more likely they were to explain the events as an act of God. These findings held even after controlling for demographic factors (educational attainment and race and ethnicity) known to be associated with religiousness (Stephens, Fryberg, Markus, & Hamedani, 2013).

One’s general religiousness influences the likelihood that one will make religious attributions. The abovementioned study of college students in the area affected by Hurricanes Katrina and Rita asked participants why events like Katrina happen. Those high in religiosity mostly identified the cause as God’s plan, while those low in religiosity were more likely to attribute the event to a freak act of nature, the law of averages, or a random natural event (Pecchioni et al., 2011). Religious groups also varied in their responses: Baptists and other Protestants were
more likely to attribute events to God’s plan, whereas Catholics and those with another religious affiliation were more likely to perceive the hurricanes as random natural events.

Further, religious attributions are often related to better recovery. In a sample of women who survived the 2004 Indonesian Tsunami studied 3 years after the disaster, attributions to karma were negatively related to depressive and PTSD symptoms (Banford, Wickrama, & Ketrin, 2014). Similarly, in the study of undergraduates after Katrina and Rita, those who attributed such disasters to God’s plan, random natural events, and law of averages had significantly lower levels of PTSD than did those who selected freak act of nature, moral karma, and payback (Pecchioni et al., 2011). Nearly half of the women surveyed near the site of the South East Anatolian (Turkey) earthquake explained the quake as the will and guidance of God, while 41% considered it a natural event and 9% blamed human irresponsibility. Women who blamed other humans’ irresponsibility for the disaster reported higher levels of depressive, somatization, and paranoid symptoms than did those explaining it as God’s will or as a natural event (Sezgin & Punamäki, 2012). In this latter study, those women who blamed other humans for the disaster also had higher levels of earthquake-related traumatic exposure, although the results remained essentially the same when controlling for trauma exposure.

Not all religious attributions are benign, however, and the specifics of the attribution influence its associations with recovery. For example, in the abovementioned sample of survivors of the Pakistani earthquake, one type of religious appraisal for the disaster, feeling punished by God for one’s sins or lack of spirituality, was, perhaps not surprisingly, associated with higher stress levels and negative emotions (Feder et al., 2013). Similarly, for survivors of the 1993 Midwest Flood (U.S.), attributing the flood to God’s love or reward was associated with better psychological adjustment and higher religious well-being but attributions to God’s anger or punishment were associated with greater distress (Smith, Pargament, Brant, & Oliver, 2000).

Attributions for the event have important implications for recovery and restoration of global meaning. Some types of attributions may help survivors maintain a view of the world as predictable and comprehensible and God as loving, while others may leave survivors feeling vulnerable and without a sense of control. Thus, although the discrepancy between situational and global meaning may be eliminated, individuals may be distressed by their newfound understanding of the world. Importantly, attributions often change over time through the processes of meaning making, reconsidering the traumatic event, and seeing it in more benevolent ways (Park, 2010), although many survivors of disaster maintain negative attributions for many years (e.g., Chenell & Murphy, 1992).

Meaning-Making Processes After Disaster

Survivors of disasters commonly report coping through meaning making (e.g., Hollifield et al., 2008). Clearly, coping through active problem solving, regulating emotions, and seeking social support can be helpful after a disaster (Wadsworth et al., 2009), but meaning making is often the best or even only option for recovery from profound damage and loss (Park, 2010). As described above, meaning making often involves changing the meaning one assigns to the disaster, but it may also involve changing one's global beliefs or goals. Individuals strive to reduce discrepancies between their appraisals of the disaster and their global meaning, and change in one or the other (or both) is necessary to reharmonize their global meaning and their experiences of the world.

A primary way to make meaning is through reappraising or reframing a stressful situation to see it in a way that is less threatening and more consonant with one's global meaning, or reconsidering one's global meaning. Reappraisal strategies are typically common and highly effective under conditions of ongoing stressors, such as in the aftermath of disasters, when many related stressors remain for substantial periods of time (Aldwin, 2007). Through reappraisal, survivors can create new, less threatening ways of viewing the disaster and its consequences, and these reappraised meanings should facilitate the reduction of discrepancies with global meaning. For example, an early study of a technological disaster surveyed a small sample of people living near Three Mile Island shortly after the disaster (a partial nuclear meltdown). Positive reappraisal coping was associated with less distress and somatic distress as well as a biological indicator of stress, norepinephrine (Collins, Baum, & Singer 1993).
A study of members of the U. S. Embassy Tokyo community in the months after the March 2011 earthquake, tsunami, and nuclear crisis in Japan found that self-reported use of positive reappraisal was not related to psychological functioning. However, using an experimental approach, they found that participants who demonstrated success using reappraisal to decrease feelings of unpleasantness in response to disaster-related pictures on a performance-based task was associated with fewer symptoms of depression and PTSD (Cavanagh, Fitzgerald, & Urry, 2014).

Depending on the circumstances, meaning making may best promote mental health when employed along with more active coping strategies. For example, in a longitudinal study of adult survivors of Hurricane Katrina who were displaced and relocated to Colorado, those who employed both direct problem solving and seeking of social support along with acceptance and reappraisal had the most resilient trajectories of recovery (Wadsworth et al., 2009). Such findings make sense, given that along with grappling with broad existential issues introduced by the disaster, individuals must create new postdisaster lives that surely involve many practical problems requiring direct action.

As noted earlier, religious coping, actions related to God or a higher power used by individuals to deal with stressful experiences, is very common after disasters (Marks, Cherry, & Silva, 2009) and appears to be the primary mechanism through which global religiousness and spirituality influences psychological outcomes in their wake (Wadworth et al, 2009). Importantly, religious coping with disasters is not just a U.S.-based phenomenon, but in fact is and has been for millennia a common approach to understanding and coping with disasters around the world (Gaillard & Texier, 2010). Positive religious coping, which includes coping efforts such as attempting to gain comfort, intimacy, and closeness with God, is generally associated with fewer symptoms of psychological distress and greater reports of psychological growth after traumatic events, although the effects are somewhat inconsistent (Pargament, Feuille, & Burdzy, 2011). On the other hand, negative religious coping, which includes reappraisals of the event as punishment from God and questioning God's power, is generally associated with fewer symptoms of psychological distress and greater reports of psychological growth after traumatic events, although the effects are somewhat inconsistent (Pargament et al., 2011).

Some studies have demonstrated favorable relations between religious coping and postdisaster adjustment. For example, in a sample of survivors displaced by Hurricane Katrina, prayer was associated with fewer stress symptoms (Spence, Lachlan, & Burke, 2007), and in the above-mentioned study of survivors of the 1993 Midwest (U.S.) Flood, positive religious coping was associated with better psychological adjustment, while negative religious coping was associated with greater distress (Smith et al., 2000).

However, religious coping with disaster is not always found to be helpful. In a sample of survivors within 2 years of the 2004 Asian tsunami, respondents’ use of their religious practices to cope was strongly positively associated with anxiety and diagnosed PTSD (Hollifield et al., 2008). In a sample of survivors of the 2005 Pakistani earthquake, positive religious coping was unrelated to PTSD (Ahmad et al., 2010), and in the abovementioned study of Hurricane Katrina survivors displaced to Colorado, positive religious coping was unrelated to PTSD or depressive symptoms, while negative religious coping was related to more PTSD symptoms but unrelated to depressive symptoms (Wadsworth et al., 2009). These inconsistent findings from research on religious coping specifically with disasters parallel those in the broader literature: Religious coping is sometimes associated with better functioning after a range of stressors, but often it is unrelated or even inversely related (e.g., Pargament et al., 2011).

Meanings Made From the Disaster

Meanings made, the outcomes of the meaning-making process, have been documented after a variety of disasters. One type of meaning made involves making changes in one’s global meaning, such as changes in global beliefs or religiousness or spirituality. Studies that assess perceptions of changes in global meaning suggest that such perceptions are common. For example, a longitudinal study of a sample of Norwegian tourists who had experienced the 2004 tsunami were asked to report on their current global beliefs and rate what those beliefs had been 6 months prior, shortly before the tsunami. Difference scores indicated that participants reported,
on average, experiencing changes on all beliefs measured in a negative direction, including invulnerability, just world, predictable world, controllable world, good and benevolent world, and meaningful life. Perceived changes toward a lower belief in a just world 2 years later were related to lower quality of life and higher PTSD symptoms, while perceived changes toward lower meaningfulness of life were associated with lower levels of quality of life but not with PTSD symptoms (Nygaard & Heir, 2012).

Perceived changes in religiousness and spirituality are a commonly studied type of meaning made after traumatic events (e.g., Falsetti, Resick, & Davis, 2003), and a few studies have examined such changes in survivors of disasters. For example, in the abovementioned sample of Norwegian tourists who experienced the 2004 Asian tsunami and were surveyed 2 years after the disaster, 8% reported strengthening and 5% reported weakening of their religious beliefs. Both perceived strengthening and weakening were associated with higher levels of posttraumatic stress (Hussain, Weisaeth, & Heir, 2011).

However, changes in global meaning are difficult to validly report after the fact; comparison studies may yield a more accurate picture. For example, a sample of people who had experienced the L’Aquila (Italy) Earthquake, compared to a matched sample of people from nearby unaffected areas, reported lower levels of spirituality and higher levels of spiritual struggle (Stratta et al., 2012). No differences in religiousness between groups were noted. Another study compared global belief scores reported by a sample of adults exposed to the Icelandic earthquakes to those of a sample of adults in a nonexposed control group. The groups differed in beliefs about luck, with the exposed group reporting feeling luckier than did those in the control group. However, no differences were noted in beliefs about the benevolence of other people or the world, justness or fairness of the world, or controllability (Bödvarsdóttir & Elklit, 2004).

In addition to changing one’s global meaning, meaning making can result in changes in how one understands the situation. For example, Carta and colleagues (Carta et al., 2012) suggested an interesting way to frame the disaster: as an impetus for giving new life. Noting the increase in births commonly evidenced 9 months after disasters, they studied new mothers 9 to 15 months after the earthquake who had been directly affected by the earthquake. These new mothers commonly reported having decided to discontinue contraception and deliberately conceive after the earthquake.

Among the commonly studied situational outcomes of meaning making are perceptions of posttraumatic growth, which refers to positive changes one attributes to a traumatic event and one’s coping with that event. Growth is often perceived in a variety of domains, including appreciation for life, coping skills, relationships with others, compassion, and life meaning and spirituality (Park, 2009). High levels of perceived growth have been reported after disasters, including earthquakes (e.g., Xu & Liao, 2011), tsunamis (e.g., Tang, 2006), and hurricanes (e.g., Lowe et al., 2013). While these perceptions of positive changes are the result of meaning making (i.e., they are meanings made), reports of perceiving positive changes may also constitute efforts toward actively reappraising how one understands the disaster—thus, these reframing efforts would constitute active meaning making (Park, 2010).

The meaning of perceived growth is unclear in spite of the hundreds of studies focusing on it (Park, 2010). Although often considered to be a positive outcome in and of itself (e.g., Shakespeare-Finch & Lurie-Beck, 2014), many studies, including those focused specifically on disaster survivors, have shown that posttraumatic growth is often positively associated with PTSD symptoms and other symptoms of distress. For example, in the prospective study of low-income mothers after Katrina, posttraumatic growth and PTSD symptoms were moderately strongly, positively correlated at both 2 and 3 years out (Lowe et al., 2013).

Similarly, posttraumatic growth was highly correlated with posttraumatic stress symptoms in a sample of adult survivors 1 year after the 2008 Sichuan Earthquake (Xu & Liao, 2011) and in a sample of Thai survivors 6 months after the 2004 tsunami (Tang, 2006). Perceived growth is not always adversely related to adjustment after disasters. For example, in survivors of the Japanese earthquake tsunami, earthquake, and nuclear disaster, perceived growth was positively related to anxiety but also negatively to depressive symptoms and positively to quality of life, perhaps due to some underlying positivity or optimism factor (Kyutoku et al., 2012).

Findings of the co-occurrence of high distress levels and high perceptions of growth are often interpreted as indicating that the perception or report of growth after traumatic events is an
effort toward coping (i.e., wanting to believe in a positive outcome rather than reflecting actual positive change; Maercker & Zoellner, 2004). It is also important to note that in a number of studies, the relationship between PTSD symptoms and perceived growth has been shown to be curvilinear rather than simply linear, such that at both low and high levels of perceived growth, PTSD symptoms are higher, but at moderate levels of growth, PTSD symptoms are lower (Shakespeare-Finch & Lurie-Beck, 2014). This hypothetical U-shaped relationship has barely been examined in the context of disasters but could account for the positive findings between postdisaster perceptions of growth and PTSD symptoms. Further, some have argued that current findings linking perceived growth with PTSD do not mean that survivors do not grow or experience positive changes after disasters—many likely do—just that self-report measures may be a poor way to assess postdisaster growth (Frazier et al., 2008).

One implication of the meaning-making model and the drive toward consistency between global and situational meaning is that sometimes the meanings made may reduce discrepancies, thus alleviating the distress, but are themselves negatively toned. For example, through making meaning of disasters, some people may come to think of themselves as having deserved their fate (e.g., Baum, Fleming, & Singer, 1983) or come to see the universe as harsh and unpredictable (Janoff-Bulman & Morgan, 1994). In considering meanings made, then, it is important to attend to their content as well as to their ability to reduce discrepancy (Park, 2010).

Summary

This brief review illustrates survivors’ meaning-making processes after disasters. Studies to date suggest both survivors’ global meaning, particularly their religiousness and sense of meaning, and the appraisals and meaning making in which they engage after the disaster are important influences on their postdisaster resilience. Meanings made in the form of changes in global beliefs and perceived growth have been reported, with inconsistent relations with adjustment. These findings, however, are far from conclusive. The very nature of disasters as unexpected and highly chaotic presents profound challenges to researchers for conducting well-planned research close to the event. Thus, most studies presented here were conducted months or years after the disaster, after which much coping and meaning making has already taken place.

Further, most postdisaster studies are typically conducted cross-sectionally. Such an approach is understandable, given the challenges of postdisaster survivors who may have been relocated and often live in remote geographic areas. Yet cross-sectional studies are particularly poor at determining any sort of temporal ordering among the studied variables (e.g., do changes in global beliefs lead to distress or does distress lead to changes in global beliefs?)

Further, to truly understand meaning making after a disaster, one needs predisaster baseline data. For example, studies of disaster that established individuals’ global beliefs, such as in a just or fair world, a benevolent God, or controllability, are virtually nonexistent. Yet understanding which types of preexisting global meaning leave people relatively vulnerable and which types lead to resilience and thriving would be extremely useful in developing prevention approaches. Some researchers have attempted to solve this problem by converting ongoing research projects into disaster-focused projects, thus having some relevant baseline data before the disaster (e.g., Chan et al., 2012).

Finally, the present review focused only on individual meaning making. Yet a defining feature of disasters is their community-wide effect, and survivors’ recovery processes unfold in the context of social relationships—families, congregations, and communities (Patterson, Weil, & Patel, 2010). To better understand the nature of disaster recovery, more comprehensive research will be needed to examine these interrelations between individual and broader social processes of coping and meaning making.

Conclusion

Given the acceleration of both technology and climate change, the likelihood of future natural and technological disasters is increasing (Wisner, 2010). These unfortunate occurrences will provide researchers with opportunities to conduct better research as well as amplify the need
Meaning Making in the Context of Disasters

for a better understanding of how to help those affected. This understanding may comprise both intervention efforts after disasters (e.g., Schulenberg, Drescher, & Baczwaski, 2014) and prevention or preparedness efforts to facilitate recovery in the event of a future disaster (Park & Slattery, 2014).

References


