

Family and Community Resilience Relative to the Experience of Mass Trauma: Connectedness to Family and Culture of Origin as the Core Components of Healing

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Introduction

The family is the integral unit of society, and the wellbeing and resilience of families and their communities¹ are inextricably linked. While most families and communities are inherently competent and resilient, when they experience three or more transitions (such as socioeconomic challenges or natural disasters) in a brief period of time they are likely to be stressed to the point of becoming symptomatic if there is imbalance between the stressors and the resources available to help them deal with the issues (Landau, 1982). How such stressors are handled is greatly influenced by the degree of connectedness to family and culture of origin. Our approach, using the Linking Human Systems Models, increases connectedness and awakens resilience at the individual, family, and community level.

Literature Review

Traumas and Transitions Begin at the Individual and Family Levels

Individuals and families all experience a variety of traumas and transitions over their lifetimes; they each may have very different reactions to similar events. For example, for some people the beginning of a pregnancy is a celebration; for others it may be traumatic. Likewise, the death of an elder family member can be a sad, but manageable, event if the death was expected or a major trauma if the elder died in tragic circumstances. In addition to such internal individual and family stressors, also ever-present are many community-wide threats that can affect people: socio-economic change, natural and human-made disasters, migration and, more recently, the global financial crisis and climate change. These challenges can be further exacerbated by inequalities of gender, wealth, resources, privilege, and power.

For both individuals and families, these stressors can lead to increased incidence of substance abuse and other addictions, post-traumatic stress disorder (PTSD), sexual risk-taking, violence, poor eating and health habits, depression, suicide, and chronic or life-threatening illness. Moreover, while traumatic events primarily affect individuals and families, they do not occur in isolation. The effects ripple out into the community, touching friends, neighbors, schools, congregations, healthcare providers, and other support systems. On the community level, trauma can also breed prejudice, marginalization, and abuse of power.

The effects of trauma can persist for generations. When the balance of stressors and resources is disrupted by an unpredictable or massive loss, individuals, families, and communities may develop unconscious adaptive behaviors and coping strategies. One member or subgroup may develop symptoms that draw the group's attention away from the loss and toward resolving the new problem. These coping mechanisms serve to shield the family or community from the pain of loss. Because the adaptation is successful, it is transmitted through the generations and across families and communities, despite its being redundant and therefore dysfunctional. Examples of

¹ The term "community" includes the natural support system: extended family, friends, neighbors, healthcare providers, clergy, employers, co-workers, etc.

such intergenerational effects of trauma can be seen in several large populations. Among U.S. Viet Nam veterans, for example, more have died of addiction or suicide than were killed in the conflict (Sitikoff, 1999). Prior to the Holocaust, rates of PTSD (Dasberg, 1987, 1994), and addiction among Jewish people were extremely low; rates are now consistent with most other populations (Danieli, 1997; Hass, 1995).

As with individual and family loss and trauma, the consequences of community-wide stressors are seldom confined to those most directly affected (Bava, Coffey, Weingarten, & Becker, 2010; Bell, 2004; Garmezy & Rutter, 1983; Landau-Stanton & Clements, 1993; Rutter, 1987; Walsh & McGoldrick, 1991). The ramifications of large-scale trauma can jeopardize entire national economies and geopolitical dynamics. Despite the seeming independence of those large-scale traumas—such as natural disasters, chronic illness, trauma, addiction, and violence—the meaningful systemic connections between them all have been well documented; the aggregate situation is often described as a syndemic (Milstein, 2002; Singer & Clair, 2003). According to an extensive study by the National Institute of Mental Health (2002), early intervention can reduce the impact of mass violence.

Healing from Trauma and Transition Also Starts with the Family

To deal with the effects of trauma on all of these levels, we need to start with the family. A family's heritage and values have profound bearing on the stresses it encounters, as well as how it handles them. Feeling connected or attached to family and culture of origin is correlated with reduced risk-taking behaviors as well as a reduction in family and societal violence, addiction, depression, suicidality, post-traumatic stress, and other chronic or life-threatening conditions (Landau, Cole, Tuttle, Clements, & Stanton, 2000). Therefore, facilitating family, cultural, and community ties and enhancing access to family and community resources can be protective against the impacts of trauma. Such connectedness fosters resilience and reduces the short- and long-term effects of stress in families and communities.

On the syndemic level, the most effective strategies for combating trauma are those that mobilize a broad range of social systems for long-term, systemic, and sustainable healing. Again, these systems depend on the inherent resilience of individuals, families, and communities; that resilience allows them to overcome tragedy and heal and ensures that future generations survive and are strengthened by the hardships they endure.

I define community resilience as a community's inherent capacity, hope, and faith to withstand major trauma, overcome adversity, and prevail, usually with increased resources, competence, and connectedness.

My approach, the Linking Human Systems (LHS) Models, helps individuals, families, and communities to heal after trauma by actively increasing connectedness at the individual, family, and community level, drawing on their inherent resilience and capacity to heal. In this chapter, I discuss the use of the LHS Models as a way to help empower individuals, families, and communities to bind their own wounds. The models help these parties to see how they can recognize and extend their social support systems, empowering them to leverage their collective power to overcome adversity and sustain long-term change—with a minimum of time and effort on the part of outside professionals (Landau, 2007; Landau-Stanton, 1986). The LHS Models are intended for intervention with individuals, families, and communities that have experienced

rapid, untimely, and unpredictable transition or loss. Such upheaval can arise from many sources: natural and human-made disasters, widespread drug abuse, AIDS and other pandemics, economic and political upheaval, urbanization and isolation of the nuclear family, and poverty.

In the next section, an overview of the significance of this topic is provided. Following that is a discussion of the theoretical background and principles of the LHS Models and the fundamentals of their implementation, including practical tips on the application of some useful tools, such as: (a) the assessment tools that enhance continuity and connectedness and evaluate resources and vulnerabilities; and (b) the tools that can identify community members who can act as natural agents for change. These community members—we refer to them as family and community links—are integral to the entire process; they allow us to rely on the family as the foundation that facilitates the entire LHS process.

Significance of the Topic

LHS interventions target individuals, families, or communities as the object of change, utilizing individual, group, or multiple community links. The practical methods of mapping, assessment, and intervention presented consider all levels of individual, family, and community involvement, paying attention to health, spirituality, culture, and lifecycle stage. Assessment of available resources and vulnerabilities, protective factors, and goals encourages and facilitates collaboration across natural and artificial support systems for building resilience, rather than perpetuating vulnerability and long-term problems for individuals, families, and communities.

Also discussed are studies and clinical vignettes of the LHS Models in action that illustrate how they have helped families and communities facing trauma to heal and grow stronger. These examples illustrate the benefits of working with family or community links to build positive attachments.

As a society, when disaster strikes we tend to tally the number of people killed or injured, number of homes lost, and dollars spent on emergency aid. But seldom do we measure the more subtle costs, such as increases in depression, anxiety, substance abuse, risky sexual behavior, and domestic abuse. And rarely do we talk about the impact of these effects across extended families, neighborhoods, and generations. Yet it is crucial that we do so, helping families and communities to harness their inherent resilience and optimize the use of their resources that can minimize the scope of damage in the immediate wake of a trauma, as well as in the years to come (Landau, 2004; Landau & Weaver, 2006).

Current Issues

Trauma is All Too Common

Every day, millions of people all over the world are subjected to traumas of one type or another: one of every five veterans returning home from Iraq or Afghanistan is suffering from PTSD or major depression, according to the Wounded warrior Project (Liang & Boyd, 2010), and a recent study found that the children of those deployed in Iraq and Afghanistan are 10% more likely to be hospitalized for a mental or behavioral health problem, compared to other children (MedlinePlus HealthDay News, 2011).

Globally, more than 43 million people were forcibly displaced—forced to leave their homes because of persecution, conflict, or other critical events—at the end of 2009, according to the latest statistics available. That number includes 15 million refugees (those who were forced to leave their countries of origin), as well as 27 million people who were internally displaced (UNHCR, 2010; WHO, 2009). According to the United Nations High Commissioner for Refugees, 2009 was the worst year for voluntary repatriation in 20 years, with ongoing conflicts in Afghanistan, Somalia, and the Democratic Republic of Congo showing “no signs of being resolved.”

Natural disasters in 2010 alone killed more than 297,000 people worldwide, affected more than 217 million others, and caused \$123 billion in economic damages. The Haiti earthquake claimed more than 222,000 lives, and in Russia more than 55,000 deaths were attributed to extreme temperatures, floods, and wildfires. The year 2010 saw 385 natural disasters worldwide and was the deadliest in at least two decades (Guha-Sapir, Vos, Below, & Ponserre et al. 2010).

On March 11, 2011, Japan was decimated by an earthquake and tsunami that left 15,000 dead and 8,500 missing (T. Tamura, personal communication, May 29, 2011). The damage spread for thousands of miles along the coastline. The Fukushima area is still in danger of nuclear contamination, and resources are scarce. With more than 91,000 Japanese living in evacuation shelters three months following the disaster, the Japanese Red Cross considers mental health a serious concern, particularly in a country with one of the highest suicide rates in the industrialized world (Hosaka, 2011). Suicide rates in Japan in May, 2011, increased 20% from the previous year, topping 3,000 for the first time in 2 years (Lah 2011).

Substance abuse, depression, and suicide are frequent consequences of major trauma as well as being traumatic to individuals and families in their own right. In the United States, about 22.5 million people in 2009 were classified as substance-dependent or substance abusers (Substance Abuse & Mental Health Services Administration, 2010). Millions more of their family members, co-workers, and friends are dealing with the emotional and financial stressors resulting from those peoples’ addictions (SAMHSA). Some of these stressors include 65-99,000 deaths from addiction, relational breakdown, and the enormous cost of medical care, unemployment, criminal justice system involvement, and addiction treatment. A large percentage of people presenting frequently to a primary care provider with minor illnesses and ailments are those living with the ongoing stress and intermittent acute trauma of addiction.

These statistics present brief snapshots of various types of traumas and disasters. Of course, we know that the effects of such events can remain for years. As the Inter-Agency Standing Committee’s report (2007) about responses to disasters stated, “The psychological and social impacts of emergencies may be acute in the short-term, but they can also undermine the long-term mental health and psycho-social well-being of the affected population,” (p.2).

The Linking Human Systems LINC Community Resilience Model

The Underlying Principles and Philosophy of the LINC Model

The principles underlying the LINC Community Resilience Model arose in part from events in my own life. The first contributing factor was my childhood, which was spent in South African communities that endured severe deprivation and political oppression. Through tribal stories and

healing rituals, the people of these communities instilled in me a deep conviction in the inherent resilience of people and in the essential worth of community connectedness.

Second, a seminal event occurred when I was three years old. At that time, a diphtheria epidemic struck my village; scores of people died and I was very ill (Landau, 1997). Our family doctor came to visit often during the crisis. He treated all members of our family as friends and colleagues, even respecting the childish chatter of my three-year-old self. He represented safety to us at a very scary time. When he was there, my parents were relatively calm; once he left, they were anxious once again. He was exceedingly helpful during that crisis. But, I later wondered, could he have somehow helped my parents to develop a structure that would have made them feel safer when he was not there? Could he have helped them to access their own competence and resilience, which would have helped them weather the trauma?

Many years later, I realized that my approach to therapy was profoundly influenced by my illness and by the behavior of our family physician at that time. That ordeal taught me that professionals need to actively respect and acknowledge the knowledge, competence, and values of the families with whom they work. They need to work to reinforce the natural support systems of those families, including their healthcare providers, and they need to avoid secrecy and isolation, while helping the families address unresolved losses.

My work over the years has taken me very far, geographically, from where I spent my childhood. But the fundamental concept of my working philosophy remains what I learned as a child at the feet of the African storytellers: that a community's capacity to heal depends on the peoples' connectedness with one another and with their family and cultural histories.

The Impact of Transition on Communities

More than a century ago, Emile Durkheim (1897) showed that crisis throws a society into disequilibrium, rendering it temporarily incapable of exercising its usual regulatory function. This leads to a sense of hopelessness and despair, which Durkheim labeled anomie. Contemporary science has since confirmed that in times of stress, our response at every level, from molecular to interpersonal to societal, is to disconnect. During such times, our psychological sense of connection between the past, present, and future—what I term the Transitional Pathway—is easily disrupted (Landau, 1982).

Numerous researchers also have shown that experiencing multiple transitions (whether normal, predictable lifecycle events or unexpected traumas) within a short period can create stress (Boss, 2001; Figley & McCubbin, 1983; Garnezy & Rutter, 1983; Holmes & Rahe, 1967;). In my own research, I have found that experiencing three or more stressors—again, normal lifecycle events or unexpected traumatic events—within a short period of time can cause disruption not just to each individual, but also to the larger family and community systems. People adjust to the stress of such changes by moving in different directions, at different rates. This asynchrony in responses between individuals and the subsystems they belong to (such as their immediate families), or between subsystems and larger community systems, I have termed transitional conflict. Left unaddressed, transitional conflict can lead to a variety of dysfunctions, including depression, suicidality, addiction, violence, post-traumatic stress, and risk-taking behaviors that can lead to HIV/AIDS (Landau, 2004; United Nations Programme on HIV/AIDS and World Health Organization, 2009). If resources are insufficient to balance the stressors, such symptoms

almost invariably will result. And the more intense, unpredictable, or traumatic the stressors, the more likely it is that they will lead to major dysfunction.

In addition, for each person directly impacted by a mass trauma, there are many others—relatives, friends, neighbors, co-workers—who also are affected. A longitudinal study of the 1995 Oklahoma City bombing, for example, showed that for every one person directly impacted by the event, five others showed symptoms of stress or PTSD years later (Brom, Danieli, & Sills, 2005). The AIDS pandemic also provides a vivid illustration of how disease can devastate communities, extending far beyond those who are directly affected. Worldwide, in 2009, 33 million people were living with HIV, the virus that causes AIDS (UNHCR, 2010). About 2.6 million more were infected with the virus that year, and 1.8 million died of AIDS. Each of those millions of people is likely to have family, friends, and co-workers who also have been affected by the individual's diagnosis in some way (UNHCR).

Terrorism and other violent events can have especially pervasive consequences, primarily because of the suddenness, unpredictability, and magnitude of loss. In the months after the September 2011 terrorist attacks in New York City, for example, almost one-third of respondents reported increased rates of cigarette, alcohol, or marijuana use (CASA, 2003; Vlahov, Galea, Ahern, Resnick, & Kilpatrick, 2004), PTSD, and depression (Galea et al., 2002). According to McKernan (2006), increases in substance abuse occur by several different mechanisms: (a) increase in use to cope with stress seen amongst the general population, particularly amongst those suffering from PTSD and depressive symptoms, and in high-risk groups such as first responders, (b) those on the verge of substance abuse or dependence cross over, (c) those actively addicted increase their use, and (d) those in recovery relapse.

Sixty days after the attacks, cases of acute myocardial infarction had increased by 35% and cardiac arrhythmias had increased by 40% (Feng, Karri, & Reddy, 2003). Abuse of drugs and alcohol rose by 29% within a year (CASA, 2003). In addition, when tragedy strikes the uncertainty about whether those missing are alive or dead creates its own stress—what Boss (1999) terms ambiguous loss.

Reconnecting the Transitional Pathway

Clearly, trauma to individuals can affect family members and others in a community. But influence also flows the other way. Family support can moderate the effects of trauma on individuals, even as the traumatized individual's experiences continue to influence the family (Catherall, 2004; Herman, 1992; Hobfoll, 1989, 1998; Matsakis, 1998; Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008; van der Kolk, 1996). For example, a one-year follow-up of 383 Israeli soldiers suffering combat stress reactions showed that family support was related to lower PTSD levels (Solomon, Mikulincer, Freid, & Wosner, 1987). Brewin, Andrews, and Valentine (2000) found that trauma severity and social support were among the strongest predictors of adjustment and PTSD symptomatology in various civilian and military samples; more social support generally led to less PTSD. These studies highlight the importance of family resources in dealing with the impact of trauma. Indeed, communities across time have found ways to share their stories of resilience, enabling subsequent generations to survive trauma and often emerge with increased strengths and resources (Hobfoll, 1989, 1998).

In order to understand the apparent resilience operating in families suffering from alcoholism after massive or unpredictable loss, I was able to explore the intergenerational story of 37 families with addiction by developing a five- to seven-generation genogram. The objective was to go back to the time before the beginning of the addiction in order to explore what had occurred around that time (Garrett & Landau, 2007). I found that the force of resilience in all families that drives us towards survival and health is the same force that drives them to develop adaptive behavior at the onset of major loss and grief. What happens is that a family member becomes addicted in an unconscious attempt to maintain family survival. The addicted person essentially carries the grief to allow the others to continue daily living and then starts to drink or use in order to assuage the heavy burden of the grief. Needing to attend to the consequences of the addictive behavior keeps the family close and prevents them from feeling the pain of intense loss and sorrow. The cycle also slows down the natural process of transitions, so that the family does not have to face the usual life cycle stages of separation until the grieving is done.

Once this has happened, the driving force of health and healing, “Family Motivation to Change,” pushes, frees, or allows a member of the family, a natural change agent or family link, to lead the family out of grief and addiction into health and recovery (Garrett & Landau, 2007). The initial protection of the family starts unconsciously as one member of the family is drawn to offer him/herself as the sacrifice to serve as the diversion for a loved one from acute pain and grief, as discussed above. The motivating force functions to prevent the loved one from suffering grief to the extent that s/he might choose to join those lost in death. Each time that the alcoholic starts to succeed at a job, at leaving home, or at any other life cycle transition, the depression, grief, or overwhelming loss of the person s/he was protecting is likely to return. At this point, the alcoholic is highly likely to relapse, to save the loved one once again. It is only once the grief is resolved throughout the extended family that the alcoholic can succeed to traverse the life cycle transition with success and move into recovery for the long term. At this stage, the same protective, driving, Family Motivation to Change force serves to bring first one member, then the rest of the family, into recovery. Continued, unresolved grief results in the alcoholism being transmitted across and down the generations until the grief is resolved, and a family member leads the family into healing. However, we discovered that we do not have to wait for the family’s natural resolution of grief through the passage of time but can intervene at any place on the genogram and in the timeline to help families access their resilience to resolve the grief and avoid the consequences of serious loss. This resilience is demonstrated by the family’s ability to resolve transitional conflict caused by the multiple stressors they have endured and their successful navigation of subsequent transitions. Further, they have learned from past experiences, understand their impact on the present, and integrate these lessons into their choices for their future.

How then, I wondered, might professionals tap into these inherent family strengths to help individuals, families, and communities to survive trauma? How could professionals use those strengths to help reconnect transitional pathways that had been disrupted by trauma?

With my colleagues, I began investigating by looking at the role of connectedness in protecting people from risk-taking activities associated with many of the stress-related conditions that follow major trauma. We studied the relationship between connectedness to family and culture of origin and the level of sexual risk-taking in two samples of women—women attending a clinic focused on sexually transmitted diseases (STDs) and women in an inner-city Hispanic

community organization. In both communities, we found that two measures correlated with reduced sexual risk-taking: knowledge of stories about grandparents or great-grandparents was a robust predictor of lower sexual risk-taking, and having at least monthly contact with extended family members was strongly associated with lower levels of sexual risk-taking (Landau et al., 2000). These measures also held up independently.

In a later study of adolescent girls who were attending a mental health clinic (for issues related to depression, anxiety, and sexual abuse), we analyzed intergenerational family stories, identifying themes of resilience (i.e., ancestors overcoming adversity) vs. vulnerability (i.e., depression, family violence, addiction). We found that knowing a story with a theme of resilience was most protective. However, knowing any family story, even if it contained themes of vulnerability, was more protective than knowing no story at all (Tuttle, Landau, Stanton, King, & Frodi, 2004). These findings suggest that being able to draw on the rituals, strengths, stories, scripts, and themes of past generations helps people to reconnect their transitional pathways. This enables families to reunite their communities, enhancing their collective resilience.

Our research found that resilience—in many forms—is a key factor in overcoming trauma. Resilience was first understood as an innate characteristic that resided within individuals, with scant attention paid to families or communities. Indeed, the earliest studies of resilience were limited to children. More recently, a growing emphasis on family and community resilience not only acknowledges that the family can be a resource for individuals in times of stress, but also recognizes the family as a functional unit in itself and the family as the essential unit of community resilience (Bell, 2001; Boss, 1999, 2001; Falicov, 1991; Figley & McCubbin, 1983; Garbarino & Kostelny, 1996; Johnson, 2002; Karpel, 1986; Landau, 1982, 2004; Landau & Saul, 2004; Rolland, 2004; Walsh, 1998, 2003; Walsh & McGoldrick, 1991; Wolin & Wolin, 1996; Wynne, 1991; Wynne, McDaniel, & Weber, 1986).

The Linking Human Systems Models

The therapeutic approach we developed, based on this research and other work, are the LHS models, which evolved in part from Transitional Family Therapy (TFT) (Horwitz, 1997; Landau & Garrett, 2006; Landau, 1982; Landau-Stanton & Clements, 1993; Seaburn, Landau-Stanton, & Horwitz, 1995; Watson & McDaniel, 1998) The TFT approach to therapy, which I began to develop in my research and practice in South Africa in the 1970s, was further honed with colleagues in the early days of the University of Rochester's Division of Family Programs.

TFT takes a systems perspective, recognizing that to address the concerns of families effectively, therapists must understand the social networks of those families, as well as the historic, geographic, economic, and cultural contexts in which they exist. Network or ecosystemic approaches have been widely used in family therapy since the 1970s, following the seminal work of Speck and Attneave (1973). Interested readers might also see earlier works of Auerswald and others (Anderson & Goolishian, 1988; Auerswald, 1968; Imber-Black, 1988; McDaniel, Hepworth, & Dougherty, 1992; Mirkin, 1990; Rueveni, 1979; Wynne et al., 1986). TFT employs an integrative, "here and now," trans-generational and ecosystemic approach that mobilizes the extended social system from the outset of therapy, highlighting past and present sources of resilience (Seaburn et al., 1995). TFT is also grounded in the idea that individuals, families, and communities are intrinsically healthy and competent. With appropriate guidance, they can access their inherent resilience to resolve their own problems.

Linking Human Systems Models		
Theoretical Model	Intervention Methods	Transitional Assessment Tools
Transitional Family Therapy	ARISE (A Relational Intervention Sequence for Engagement)	Transitional Genogram Transitional Field Map
	LIFE (Link Individual Family Empowerment Intervention)	Transitional Field Map Multisystemic Level Map Transitional Strategic Polarization Map
	LINC Community Resilience	Transitional Field Map Multisystemic Level Map Transitional Strategic Polarization Map Structural Pyramid Map

Table 1 Link Approach Visual Model (Landau et al., 2008)

The core philosophy of the LHS Models is that building a sense of continuity from past to future helps people navigate the present with greater awareness of their choices (Landau, 2007; Landau et al., 2000; Landau, Mittal, & Wieling, 2008; Landau-Stanton, 1986; Landau-Stanton, Griffiths, & Mason, 1981; Suddaby & Landau, 1998;). LHS Intervention Models are designed specifically to resolve transitional conflict by creating resolution and synchrony across the system. The goals are to engage the entire system in the process of change, eliminate blame, reduce shame and guilt, and identify and access naturally available resources for healing.

The LHS Models achieve these goals through a well-defined intervention process that is guided by a professional therapist or interventionist. Each intervention includes: assessment of the issue, relationships, and resources available, using a variety of tools; identification of individuals who will serve as integral family and community links throughout the process; and prescribed steps for moving toward healing. A variety of LHS Intervention Models are available for use, depending on the issues and communities being addressed; they can be carried out at the level of individuals, families, or communities (Table 1).

It is important to note that LHS Intervention Models are process-driven rather than content-driven. Process-driven interventions are replicable anywhere because the process is provided in consultation with the affected parties and the content belongs to the context and culture of the situation at hand. These programs are essentially redesigned each time, using the process in each context and cultural situation, so they belong to the local target population. Involvement of external professionals is initially intensive, but brief; it is gradually reduced over time, empowering local people to take over and be successful in their own right. Content-based programs, conversely, often cannot be effectively replicated in different contexts and cultures and tend to require intensive and lengthy professional involvement.

Continuity and Connectedness

LHS Intervention Models focus on continuity and connectedness. Every intervention begins with an assessment process intended in part to help re-establish the continuity between past, present, and future for a family or community. During this process, stories and histories emerge that shed light on the social, cultural, and historical context of the situation at hand, as well as on the ways in which families and communities confront their problems. This enables people to gain perspective on the complex systems in which they live and to see their families or communities in a fresh light. The process diffuses blame and anger and makes room for more constructive interactions that draw upon a full range of resources and strengths (Landau, 2007; Landau-Stanton, 1986; Watson & McDaniel, 1998).

The assessment process also sets the stage for enhancing connectedness within the extended family, the community, and the natural support systems, a critical aspect of fostering resilience (Bell, 2001; Bowlby, 1969; Johnson, 2002; Main, 1995). By re-establishing continuity with their forebears, people are reminded how their predecessors weathered difficulties and are reassured about their own competence (Landau, 2004; Seaburn et al., 1995). Building connectedness by enlarging and mobilizing natural support systems provides people with resources—tangible and intangible—that enhance their ability to overcome adversity (Hobfoll, 1989, 1998; Melton, Holaday, & Kimbrough-Melton, 2008). Achieving a strong sense of connectedness promotes a feeling of solidarity among family and community members. This eliminates counterproductive we/they dichotomies.

The role of connectedness in protecting against vulnerability was well-illustrated in the two research studies mentioned earlier: knowing stories about grandparents or great-grandparents and having at least monthly contact with extended family members were strongly associated with lower levels of sexual risk-taking. Knowing any story, even if it contained themes of vulnerability, was more protective than knowing no story at all. These findings suggest that being able to draw on the resilience of past generations helps people explicate and reconnect their transitional pathways. Then they can make informed choices about where to go and how to get there.

Assessment Tools for Linking Human Systems Intervention Models

LHS Intervention Models rely heavily upon assessment tools that are designed to evaluate the following: (a) whether connectedness and continuity of the Transitional Pathway have been disrupted; (b) whether strengths and themes of resilience, rather than vulnerability, are being mobilized in the struggle with hardship; (c) what the overall level of stress is; (d) how stressors and resources are balanced; and (e) whether family and community resources are available, accessed, and utilized.

The assessment tools use a number of geographic, sociological, and therapeutic maps (Landau, 1982, 2007; Landau et al., 2008; Landau-Stanton & Clements, 1993).

The Transitional Genogram depicts important family genealogy, themes, scripts, events, relationships, conflicts, and strengths across as many generations as possible. It also maps belief systems in the sociocultural context (Landau, 1982, 2007; Landau-Stanton & Clements, 1993).

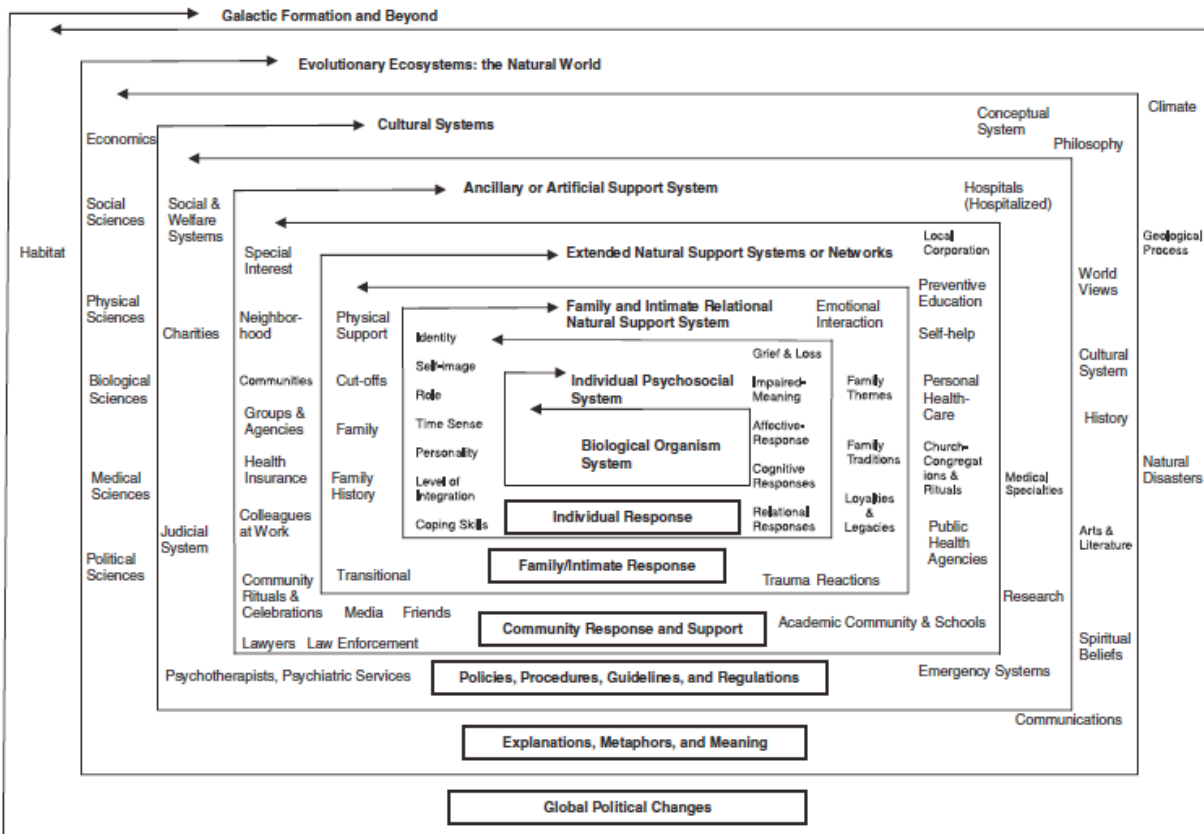


Fig. 1 Transitional Field Map (Landau-Stanton & Clements, 1993)

The Transitional Field Map provides a schematic representation of a family or community's members, problems, resources, events, themes, and histories in every level of the network, including biological and individual psychosocial systems, natural and ancillary (artificial) support systems, and cultural and ecosystems (Landau-Stanton & Clements, 1993). The Transitional Field Map also serves to underscore that each level within a system (family, community, culture, and context) affects the others (Fig. 1).

The Multisystemic Levels Map examines in further detail “slices” of the Transitional Field Map that focus on past and current events in the community, sources of resilience, and other features of the community’s response to loss or trauma that may guide decisions about intervention (Fig. 2) (Landau & Saul, 2004).

The Structural Pyramid Map assists in the detailed design of an intervention (Landau, 2007). This map represents all members of the family or community, including target individuals, family members, extended family groups, schools, neighborhoods, local authorities and political leaders, and professionals. It highlights those with special skills and leadership positions, as well as majority and minority populations, to help ensure that everyone in the system is informed, there are no secrets, authority is acknowledged, and all potential change-makers are included. This detailed process provides insight not only to outside professionals attempting to guide families or communities toward healing, but also to the families and communities themselves.

Multisystemic Levels Map: Terrorist Attacks, New York City, 9/11/2001					
Systemic Level	Traumatic Event(s) Impact (Severity and Duration)	Protective Factors Resources and Resiliency	Symbolization and Narrative System	Problematic Reactions to Event(s) and Long- Term Sequelae	Interventions and Prevention
Biological System <ul style="list-style-type: none"> Physical Nervous system Endocrine 	Death, injury, CNS response Respiratory problems from debris	Levels of physical fitness and health, youth, stress inoculation, mind-body-spirit practices	Somatic expression, dreams	Somatic symptoms, respiratory and health problems	Pharmacological agents, mind-body-spirit regulatory practices and intervention, physical self-care
Individual Psychological System <ul style="list-style-type: none"> Cognition Emotions Behavior Relations 	Loss, insecurity, disruption of routine & role, fear and anxiety Dissociation, altered time	Personality and coping skills, identity, self-image, cognitive skills, relational behavior, affect regulation	Recall and constructions of dreams and intrusive memories, and multiple personal meanings	Anxiety, depression, acute stress symptoms, PTSD, grief reactions Aggression and suicidality, alcohol and substance abuse	Individual counseling and therapy, stress-relieving interventions, psychoeducation, enhancing intrinsic strengths, facilitation of posttraumatic growth Psychological and emotional self-care Recreational, physical, and artistic activities
Social Systems <ul style="list-style-type: none"> Family and intimate relations Natural support system: local community—church, neighborhood, school, work, other groups Ethnic/national/global Ancillary support system—emergency, hospital, welfare 	Separation and loss, change in relational behavior and bonding, stress on family and other social groups, displacement, disruption of role and routine Increased connectedness & bonding Communication breakdown, media response Activation of ancillary support system	Family support, competence of natural supports, community organization and support, history of family and community Community self-mobilization, organization and support. National and international support Ancillary support	Collective narration with family, friends, neighborhood, and community National and global narratives	Disruption of family life cycle, neighborhood relations Flight from city and severing of social attachments Displacement of families and work organizations Stress due to loss of income, housing, employment Intrusion of ancillary support systems	Family, group, and network counseling and therapy Mobilization and facilitation of natural support systems by ancillary support systems. Peer support networks Building on long-term preventive groups and methods Organizing community forums; enhancing social connectedness for communication, problem-solving, and resource-accessing
Cultural Systems <ul style="list-style-type: none"> Meaning systems Knowledge systems Language and symbols Identity Rituals and practices 	Shattered world assumptions, sense of invulnerability and safety	Creation of rituals Religious and spiritual solace, patriotism, sources of coherent world view, arts and literature, communication	Interpretation of collective narration, of old and new rituals, contextualizing and memorializing, creation of new symbols, 9/11 as a temporal marker	Increasing rigidity and resort to primitive belief systems, discriminatory responses to Arab & Muslim minorities	Changing cultural belief systems from vulnerability to resilience Facilitation of new rituals and practices focused on communal grieving, revitalization, and conciliation, cultural legacy, and mission
Ecosystemic Environment <ul style="list-style-type: none"> Physical and natural world Economic & political context 	Environmental destruction and hazard Mobilization of rhetoric	Economic and political resources, physical	Impact of environmental, economic, and political change on symbolic systems	Disruption of utilities, transportation, and communication Exaggerated political responses (Patriot Act and curtailment of civil rights)	Clean-up of environment, plan for reconstruction War on terrorism, preemptive strikes

Fig. 2 Multisystemic Field Map, example following the New York City September 11th, 2001, terrorist attacks (Landau & Saul, 2004)

Family and Community Links as Natural Change Agents

A fundamental goal of the assessment process is to identify the natural change agents who will serve as Family and Community Links throughout the intervention. Central to the LHS approach is the recruitment and coaching of individual members of the family or community who can bridge the gap between the professional and the family or community in need (Landau, 1981, 1982, 2007; Landau et al., 2008). Ideally, these family and community links, referred to hereafter as Links, are acceptable to and respected by all members of the group. A Link’s ability to convene representatives from all levels of the family or community structure is critical to the success of the LHS Intervention Model, so it is important to avoid selecting leaders who cannot garner broad support or who might derail the process for their own aggrandizement or personal gain. The Link should be a person who is unbiased and is able to view the problem from multiple perspectives. The Link should avoid affiliating with only one position or faction and artificially driving the decision-making process and subsequent action. Links may function individually or in pairs or larger groups.

Soon after the assessment in which the Link is selected, the professional begins coaching the Link to assist the family or community in resolving its problems. This reinforces the Link’s confidence in his or her expertise about the family or community. A central advantage of utilizing Links is that the Link facilitates the professional’s access to social systems that might otherwise resist outside “interference,” or that might invite intervention during a crisis but

quickly discontinue participation once the crisis is resolved. Working with Links is particularly useful for professionals attempting to intervene within “closed” social systems, such as traditional extended families and clans, or highly educated and sophisticated communities. Harnessing the power of a Link maintains respect for the traditions, strengths, pride and privacy of a family or community and capitalizes on the group’s capacity for healthy change and survival.

Principles of the LHS Models

Whether executed at the level of individuals, families, or communities, the LHS approach is guided by the following principles:

- Involve all components of the extended social system.
- Ensure representation of each layer of the Transitional Field Map.
- Ensure invitation, authority, permission, and commitment from family or community members or leaders who are widely accepted by the larger system.
- Ensure access to biological, psychological, and spiritual resources.
- Directly relate the program to the group’s goals, future directions, and best interests.
- Develop and prioritize realistic tasks from the goals, and then devise practical projects.
- Build on existing resources, assigning projects to appropriate resources.
- Provide the process, remaining peripheral and encouraging the group to take responsibility for the content, goals, and actions.
- Attribute success of the program where it belongs—with the individual, family, or community.

LHS Models in Action

Family and community links can implement prevention and intervention at the individual, family, and community levels in a wide array of circumstances.

Individual Level: The ARISE Intervention (A Relational Invitational Sequence for Engagement) Intervention and Continuum of Care

The ARISE Intervention and Continuum of Care starts with an invitational, non-confrontational, gradually escalating intervention process designed to engage a problem individual and his or her family in treatment for a minimum of one year. The person with a problem is invited to participate in the process; the goal is long-term individual and family healing and recovery (Landau & Garrett, 2006, 2008). The ARISE Intervention is applicable to destructive behaviors such as substance abuse and addiction, as well as process or behavioral compulsions such as gambling, gaming, over-spending, Internet compulsion, sexual acting-out, cybersex, and eating disorders. It is also applicable for those struggling with chronic or life-threatening physical, mental, or emotional/spiritual issues (Landau et al., 2000; Landau et al., 2004).

The goal of an ARISE Intervention is to use the least amount of effort needed to motivate a substance abuser into treatment, stepping up the level of pressure gradually to match the intensity of resistance from the addicted individual. The collaboration between the Interventionist and the family relies on the understanding that, while the Interventionist is the expert on the interface between families and addiction, the family is the expert on itself. Throughout the process, the family is encouraged to take into account what they think will work. They are also encouraged to offer a selection of choices to the addicted individual so as to reduce the likelihood of a rebellious response. The dual focus of the ARISE Intervention is on engaging the addicted individual in treatment and supporting the family in healing from the effects of living with addiction for a long time. The power of the ARISE process lies in the collective motivation of the Intervention Network to bring about change (Fernandez et al., 2000). As the family's behavior changes, the substance abuser inevitably follows suit because as the family system changes, so do the individuals within it. We find typically that if there are additional family members with substance abuse or other behavioral compulsions, they also embark on the recovery process.

The ARISE Continuum of Care consists of three phases: Phase A, comprising the actual Invitational Intervention, mobilizes the Intervention Network toward motivating the addicted individual into treatment. Incremental pressure is applied until this is achieved. Phase B is a transitional phase, averaging six months, in which the Intervention Network supports the loved one through treatment and into early recovery. The goal is treatment completion, family relational improvement, grief resolution, and relapse prevention. Phase C, lasting 6-12 months, aims at the family's becoming a family living in long-term recovery, with long-term individual and intergenerational family recovery and healing. It focuses on reinforcing the family's behavioral changes and on healthy behaviors and lifestyle.

Phase A: Invitational Intervention.

Level 1: The First Call. Phase A starts when a concerned person contacts a Certified ARISE Interventionist. The first call or contact is either a brief phone consultation or visit during which the Interventionist coaches and empowers the caller to mobilize the support system as an Intervention Network to invite the addicted individual to a First Meeting. Pivotal to Level 1 is development of the Recovery Message, which explicitly states the understanding of where the addiction started in the family and the intent to keep it from progressing into future generations. The Recovery Message is used to help families understand the addictive pattern across generations, to relieve the guilt, shame, and blame, and to bring hope for the future health of the family. It is the central component of the invitation to the Intervention and always draws on the strengths, survival, and love in the family.

At the first meeting, members of the Intervention Network share their concerns and ask the individual to enter treatment. The meeting commences whether or not the addicted individual chooses to attend. A primary focus of Phase A is getting the commitment from the family to enter and commit to the recovery process. At Level 1, 56% of individuals enter treatment.

Level 2: Strength in Numbers. Level 2 begins only if the substance abuser has not entered treatment and the Intervention Network wants to escalate their effort. This typically occurs after two to five meetings or six months. The addicted individual's participation is continually encouraged, though his or her refusal does not deter the Intervention Network from their work.

Strategies evolve over the course of these sessions and the network grows in strength as a group, allowing it to deliver a consistent message to the individual. All decisions are made by the majority of the Intervention Network. This prevents isolation and the vulnerability of any member to the one-on-one manipulation characteristic of addiction. After two to five Level 2 meetings, 80% have entered treatment.

Level 3: The Formal ARISE Intervention. Fewer than 2% of families need to proceed to Level 3. At this level, the Intervention Network sets strict limits and consequences for the problem person, expressed in a loving and supportive way. By this time, the substance abuser has been given and refused many opportunities to enter treatment. Since the substance abuser has been invited to every meeting, this final limit-setting approach is a natural consequence and does not come as a surprise. The Intervention Network commits to supporting each other in the implementation of the agreed upon consequences.

Phase B: Supporting Treatment and Early Recovery

Once the substance abuser enters treatment, or six months has elapsed, Phase B begins. The Intervention Network continues meeting to support the recovery process. It is important for the encouragement and support of the family to take place over a period of time and through difficulties and stress that invariably arise during this transitional period. The Network collaborates with the addicted individual and his or her treatment providers to ensure that the group addresses the following topics as they pertain to each member of the network: physical, mental, emotional, and spiritual health; relapse prevention and psycho-education about addiction; family, social, and fellowship support; and financial and career vitality.

Phase C: Living In Recovery

Phase C focuses on the individual and family living in recovery. This includes relapse prevention, attendance at self-help meetings, continued family therapy and psychoeducation, and grief resolution. Of primary importance is developing awareness of the details of family communication, relationships, patterns, and activities of daily living to ensure that difficult issues are discussed openly and without secrecy so that the family can learn to grieve, heal, celebrate, relax, and have fun together.

Research Findings

A clinical study was conducted through the National Institute on Drug Abuse (NIDA) on the cost-effectiveness of the ARISE Intervention for engaging resistant substance abusers in treatment or self-help. The primary outcome variable was dichotomous: did the substance abuser, within six months from the first call, engage in treatment or self-help by physically either a) showing up and enrolling in treatment, or b) attending self-help meetings. Results showed an 82.7% success rate. In a study of 110 individuals, 86 engaged in treatment while five engaged in self-help (Landau et al., 2004). Half of those who entered treatment did so within one week of the initial call, 76% within two weeks, and 84% within three weeks. The engagement rate did not differ across preferred substance of abuse, the level at which engagement occurred, or demographic variables such as age, gender, or race.

The outcome/effort scale (OES) was used to refine the above dichotomous outcome score (engaged vs. nonengaged) on the premise that a successful engagement achieved with less

Variable	NIDA (n = 110)		SSTAR (n = 39)	
	No.	%	No.	%
Engaged in treatment or self-help	91	83	31	80
Relationship of First Caller				
Parents	44	40	18	46
Spouse/partner	34	31	7	18
Offspring	4	4	2	5
Other relatives	21	19	12	31
Non-relatives	7	6	0	0
Gender of First Caller				
Female	76	69	30	77
Male	34	31	9	23
Average Intervention Network size	3	–	2.5	–

Table 2 Outcome Comparison Between National Institute on Drug Abuse (NIDA) study and a Real World Data from Stanley Street Treatment and Resources (SSTAR) (Landau, 2010)

clinician time and effort should be viewed as a more positive outcome than a successful engagement that entailed greater clinician time/effort. Conversely, an unsuccessful engagement in which the First Caller refused even to attempt ARISE should be viewed as more negative than an unsuccessful case in which at least some effort was made. A score was thus assigned to each case using a five-point scale: First Caller refused ARISE (-2); ARISE was attempted but failed (-1); engagement success at Level 3 (1); engagement success at Level 2 (2); engagement success at Level 1 (3). On average, professionals spent less than 90 minutes coaching concerned friends and family members to mobilize their networks to motivate addicted subjects to enter treatment. The mean amount of time required was 88 minutes with a median of 75 minutes.

A recent “real world” study on ARISE conducted by Stanley Street Treatment and Resources (SSTAR) replicated the results from the NIDA study with an 80% engagement rate (Table 2). A one-year follow-up study by SSTAR demonstrated a 61% sobriety rate with an additional 10% improved (Table 3) (Landau & Garrett, 2008). SSTAR also recently conducted a pilot study in which the ARISE Intervention was initiated by the addicted individuals themselves while in detox. The goal was to determine how effective the ARISE Intervention is at ensuring that after detox these patients engaged in secondary and tertiary care. The study participants, of whom 55% were homeless, ranged from five to 12 prior admissions to detox, with an average of ten prior admissions. The study found that 82% of the participants went on to a secondary level of care; of those, 100% went on to a tertiary level of care; 91% reported that they were active in Narcotics Anonymous (NA) or Alcoholics Anonymous (AA). At the time of last contact, at 12 months, 55% had not relapsed. Of those who had, 80% were back in treatment (P. Emsellem, personal communication, October, 21, 2009).

Family Level: Link Individual Family Empowerment

Link Individual Family Empowerment (LIFE) focuses on helping families work together to revise their themes of vulnerability to themes of resilience (Landau et al., 2008). The LIFE intervention is a formal, eight-session program; it focuses on enhancing positive connectedness to family and culture of origin, in line with our earlier findings that frequency of visits to extended family and knowledge of intergenerational stories of family resilience is correlated with reduced risk-taking. It also grew from studies on connectedness and self-protective behavior

Variable (<i>n</i> = 90)	No.		%
Engaged in Treatment	68		76
Engaged in Secondary Care	36		53
Sobriety Status			
Sober at last contact	41		45.5
Period of sobriety w/ relapse	14		15.5
Reduced use	9		10
No change	11		12
No information	15		17

Table 3 Data From Real World Study at SSTAR of Sobriety Status at the One-Year Mark (Landau, 2010)

(Landau, 2007; Landau, Cole et al., 1995; Landau et al. 1996). In those studies, we found that the actual stories of families who interpreted their themes as vulnerable were not so different from those that others interpreted as resilient. The difference was in perspective: the children who perceived their families as being overcome by disaster, horrible events, or abuse took greater risks, while those children who had the same stories but perceived them as stories of success and overcoming adversity were resilient. Helping children to see their family’s intergenerational strengths and positive themes can change their perceptions of their own capacity for positive change, as well as that of their families. This serves to build self-advocacy and hope, bringing positive connectedness to the nuclear, as well as the intergenerational, family and the expectation of achievement and positive change.

Six of the sessions in a LIFE intervention focus specifically on creating positive connectedness by working with the Links to explore intergenerational family stories of vulnerability and resilience, helping recreate ritual and celebration so the perspective is positive (Imber-Black & Roberts, 1992; Landau et al. 2000; Tuttle et al., 2004; White & Epston, 1990;). Two of the sessions, typically the final ones, focus on the specific need, problem, or goals of the particular family.

The original LIFE study was a qualitative, developmental study conducted in Rochester, New York, and Taipei, Taiwan (Landau et al., 1996). Its focus was to prevent the spread of HIV/AIDS in the immediate and extended family and in the neighborhood. Links in this case were HIV-positive family members who were best connected to other family members and neighbors. Single- and multi-family LIFE interventions have since been applied in a number of contexts, including child abuse and domestic violence (the Bronx, New York), addiction (Argentina and Kosovo), and cultural transition (refugee families in Kosovo and the United States). A current federal study at the University of Rochester is applying the LIFE Intervention Model to inner-city abused women to empower them to prevent further abuse, STDs, and HIV in themselves and families.

Community Level: LINC Community Resilience

A LINC Community Resilience Intervention involves an entire community or its representatives in assessing a situation and designing its own intervention (Landau, 2007). This type of intervention can be used within a community or by governments and organizations as a way to prepare for and/or resolve the consequences of mass disasters (Landau, 2004, 2007; Landau et al., 2008; Landau & Saul 2004; Landau & Weaver, 2006).

The intervention uses a series of maps to assess demographics, attitudes, customs, family structures, and important events in the community. Following this assessment, community forums are organized, each representing a comprehensive cross-section of the population. In larger communities (more than 6,000 people), LINC Community Resilience Interventions begin with consultants who train local professionals to assist in facilitating the intervention so that the entire community may be reached.

Following LINC guidelines, members of the community are divided into small discussion groups, each representing a cross-section of the community. The groups identify the strengths, themes, scripts, and resources that are available within the community and discuss what the concept of resilience means to them individually, as well as to their families and community. Each group then develops overarching goals for the future. Groups usually embrace the goals set by the collective, but they also usually add several of their own. They discuss ways in which their available resources can be applied to each small and easily achievable task that is derived from one of the goals.

The groups then work as collaborative teams to select their community Links; these are people from within their own group whom they trust and with whom they can communicate easily. Links are identified as people who would make good leaders and who are able to bridge the gap between the community and outside professionals. Members of the collaborative teams then identify practical tasks from their goals and arrange work groups to achieve them. The number of Links depends in part on the size of the community. Medium-sized communities (populations of 6,000-50,000 people) select, on average, three to five Links; larger cities (50,000-one million people) select eight to ten Links, each of whom coordinates multiple projects.

Clinical and Research Implications

A recent SAMHSA report (2010) summarized current evidence-based interventions for mass trauma and supported the critical need for empirically-based systemic interventions. The global context of mass trauma resulting from war and organized violence encompasses an array of historical, social, economic, and political contexts. These must be carefully understood for professionals to develop meaningful programs of intervention with communities exposed to traumatic events and the related mental health consequences. Psychotherapists must respond to the increasing needs of traumatized families around the world by developing preventive and clinical interventions that are evidence-based, culturally relevant, and context-specific.

Currently, there are few evidence-based treatments directed at family or community levels for treatment after mass traumatic events. There are a number of highly effective preventive interventions focused on issues such as refugee mental health and HIV/AIDS. However, there is little work directed toward better understanding how to intervene effectively with families in their communities when they have been affected by mass trauma. The body of work presented in this chapter represents one of these approaches; it has been implemented across different trauma contexts and with different populations around the world.

The Linking Human Systems Models are examples of intervention and research that are ecologically based, are grounded in people's generative inner strengths and experiences, and that cut across all levels of a system that might be tapped into as a potential resource for rebuilding personal resilience and strength after mass trauma.

Case Examples: Assessing Resilience in Operation

A Family in Crisis

The following illustrates how we go about assessing resilience in a family situation. The situation involved a family in Finland. A 25-year-old man in the family had assaulted his wife. Their family was appalled and had threatened to put him in prison. The couple was referred for therapy by the prison diversion program because this was his first episode of violence.

To begin, to assess the practical aspects of resilience we used the Family Resilience Questionnaire (Landau & Weaver, 2005), which helps us to:

- Find out what resources are available within the families and community as a whole.
- Explore how the resources are being accessed and utilized so that we can estimate the balance between stressors and resources.
- Establish whether connectedness and continuity of the Transitional Pathway has been disrupted.
- Find out whether the families and communities know their stories about past adversities and how they overcame them.
- Establish whether clusters of strengths and themes of resilience rather than vulnerability are being mobilized.

In this situation, we were able to discover the following:

- Both spouses had extended families who loved them and wanted to help. Both families lived in the same neighborhood.
- The husband was reluctant to ask for help from his family, although he was struggling to support his young wife who was still at university. He was not talking to anybody, including his wife, about the stress of his own job or his financial difficulties. He was also not sharing with anyone his concerns about his mother's recent diagnosis of breast cancer.
- When we explored the history, it became clear that during 90 years of war, almost every family in Finland had lost several men. The Transitional Pathway had been disrupted. The rule about the many years of war was silence, and no resolution had occurred despite the fact that the war was over and the men were no longer being killed or were missing.
- The wife's grandfather had died in World War II, and her husband had also lost several male family members. The dominant culture's and this family's way of dealing with this ongoing and immutable situation was with total silence. Nobody talked about the missing men or the unresolved grief. However, in both families, similarly to most other Finnish families, in an attempt to adapt to the loss of the men and maintain healthy function of their families, the women had taken over many of the men's roles and had become extremely strong and competent.

- Now that the situation was different and the men were no longer going to war and being missing or killed, the strengths that had been mobilized and been adaptive in the past were no longer relevant or needed. Now, the current generation of young men objected strenuously to the women's behavior. They acted out against what they perceived as overbearing control and a lack of their own autonomy. They felt almost redundant and were extremely resentful of their mothers, sisters, and wives. The rate of addiction and sexual risk-taking had increased along with domestic violence and petty urban crime.

In this case example, it was clear that the family members really loved each other and were very connected. However, the husband felt helpless, isolated, and angry. Once he understood the history, and that the change in roles originally had been adaptive, he was able to understand his mother's and wife's behaviors. Once this occurred, he found that he could share his concerns about his finances, his future, and his overwhelming sense of obligation. Together, he and his parents, parents-in-law, and wife were able to design their future.

A Community in Crisis

After a lengthy period of severe political unrest and upheaval in Argentina from the late 1970s that culminated with a serious economic crisis in 1990, I was invited to perform a wide-scale survey to assess the problems in the community. The survey showed that there was an increase in the prevalence of addiction and HIV/AIDS in Buenos Aires Province (with an urban and rural population of 12 million). To combat these problems, health officials invited us to help develop a province-wide, community-based program focused on both prevention and intervention.

We first trained professionals and paraprofessionals to use the assessment and intervention protocols of the LINC model. Then, we developed pre- and post-program surveys and used a series of maps to assess demographics, attitudes and customs, family structures, and important events in the communities. Following this assessment, we organized community forums, each representing a comprehensive cross-section of the population. There, members of the community (sometimes as many as 5,000) developed their own concept of resilience, using such words as trust, faith, confidence, hope, loyalty, spirituality, and survival. Following LINC protocol guidelines, they divided into small discussion groups, each representing a cross-section of the community. Each group developed overarching goals for the future, embracing those set by the ministry but also adding several of their own. The groups then worked as collaborative teams to select their community Links—people from within their own groups whom they trusted and with whom they could easily communicate, whom they thought would make good leaders, or links between their community and us as outside professionals. They then identified workable tasks from their goals and arranged work groups to achieve them.

Some of the activities and groups that developed in different communities in Buenos Aires Province included: a partnership of police, school personnel, parents, and community residents to expel drug dealers from the neighborhood; support of a preexisting formal organization, *Padre a Padre*, designed to serve parents of children struggling with issues of substance abuse or addiction (this organization grew into a nationwide initiative that continues to meet); a program for evening education for literacy, business skills, and handcrafts; and a social group for children and families of the military to become integrated into the communities in which they were stationed. Within two years, there was a 400% increase in the admission to treatment of young

people struggling with alcohol or drug abuse—most of whom were brought to and supported in their treatment by family members.

Summary and Conclusion

The Linking Human Systems Models and the specific methods that developed from it are examples of ecologically based, culturally informed, multi-level, multi-informant systemic interventions to assist populations affected by mass trauma. These populations are vulnerable to developing a host of psychological, emotional, and relational disturbances, including the increased incidence of risk-taking behaviors often associated with traumatic events. As described earlier, systemic interventions incorporating comprehensive biopsychosocial dimensions to assist communities after mass trauma are virtually nonexistent. The Linking Human Systems Models are powerful in their ability to promote healing and reconnection by accessing inherent strengths within families and communities. We would argue that if more mental health professionals and paraprofessionals were prepared to assist families in identifying their own strengths and resilience post-trauma, the escalation of maladaptive behaviors, emotional and relational disturbances, and severe psychological symptoms could be prevented and/or ameliorated.

The author is working collaboratively with an international group of scholars who are involved in communities affected by war and disaster and the resulting situations of mass trauma. We are currently designing a small-scale study to implement and test LIFE in some of these communities around the globe in order to develop solid and empirically-based support for this approach. We know of no other group of family therapists currently undertaking this type of research with mass trauma. Our long-term vision is to collaborate with this team of scholars to develop a multi-phased and multi-component tiered system of interventions that integrates: (a) an individual evidence-based intervention; (b) a parenting intervention; (c) a family-level intervention; and (d) a community-level intervention. We believe that the Linking Human Systems Models offer promise as an overall approach for guiding the family and community interventions.

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