

Resilience in Ecosystemic Context: Evolution of the Concept

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The evolution of the resilience literature across diverse social science disciplines over the past two decades is reviewed and a synthesis of recent findings is offered, suggesting that resilience is a multidetermined and ever-changing product of interacting forces within a given ecosystemic context. Emerging constructions of the concept are examined, and a refined working definition is proposed. Implications for research and practice are offered.

The world breaks everyone and afterward many are strong at the broken places.

—Ernest Hemingway, *A Farewell to Arms*

While it is essential to understand what makes people break, it is equally important to understand what contributes to positive adaptational outcomes in the face of adversity; that is, what makes us “strong at the broken places.” A growing body of evidence in resilience research challenges the conventional wisdom that growing up in oppressive conditions inevitably damages individuals and thwarts development (Barnard, 1994; Dugan & Coles, 1989; Walsh, 1998; Werner & Smith, 1992; Wolin & Wolin, 1993). In fact, it appears that some individuals who are challenged by adversity emerge stronger, with capacities that they may not have developed otherwise (Higgins, 1994). Some contemporary resilience researchers have even suggested that resilience does not occur in spite of adversity, but *because* of it (Walsh, 1998).

This paper will review the resilience literature as it has evolved across diverse social science disciplines over the past two decades, and synthesize recent research suggesting that resilience is a multidetermined and ever-changing product of interacting forces within a given ecosystemic context. It

will review varying constructions of the concept, refine the definition of resilience, and elaborate implications for research and practice.

The Ecosystemic Perspective

The ecosystemic perspective is “a way of thinking and organizing knowledge that emphasizes the interrelatedness and interdependency” between individuals and social systems (e.g., families, groups, organizations, communities, societies) (Queralt, 1996, p. 17). The researcher’s focus expands from what takes place within systems to include what goes on between them. From this point of view, development is a “continuous process of adaptation and accommodation between individuals and their environments” (Queralt, 1996, p. 17), that is, human development does not happen in a vacuum but, rather, is the product of continuous transactions between individuals and the physical, social, class, and cultural environments in which they grow (Germain & Gitterman, 1987).

EVOLUTION OF THE RESILIENCE CONCEPT

Resilience research, having originated in the disciplines of psychiatry and developmental psychology, has tended to focus on within-person factors, rather than considering the ecosystemic context of

adaptation. While the ecosystemic perspective is a longstanding theme in the social work literature (Richmond, 1917; Towle, 1945; Twente, 1965), it is relatively new to resilience research. For example, Jessor (1993) described the ecosystemic perspective as an "emerging paradigm" in adolescent research. Calling for an interdisciplinary effort to explore the "articulation of psychological processes with those of...the nonpsychological environment" (p. 118), Jessor advocated cross-fertilization among the social science disciplines.

The study of resilience emerged from the study of risk. In examining the lives of "at-risk" children, pioneering investigators recognized that some youngsters thrive in the midst of adversity and become healthy adults (Anthony, 1987; Garmezy, 1994; Matsen, Best, & Garmezy, 1990; Murphy & Moriarty, 1976; Rutter, 1979; Werner & Smith, 1982). Over the past two decades, a recurring theme in resilience research is that most individuals who face adversity have more positive outcomes than one might predict based on the risk factors in their lives (Barnard, 1994; Bleuler, 1978; Garbarino, Dubrow, Kostelny, & Pardo, 1992; Garmezy, 1971, 1994; Hauser, Vieyra, Jacobson, & Wertlieb, 1985; Luthar & Zigler, 1991; Matsen, 1994; Rutter, 1979; Vaillant, 1993). In fact, Wolin and Wolin (1995) reported that about two-thirds of "at-risk" children survive risk experiences without major developmental disruptions.

Resilience was initially conceptualized as the result of personality traits or coping styles that seemed to make some children continue to progress along a positive developmental trajectory even when confronted with considerable adversity. These children were variously termed "hardy," "invulnerable," "superkids," or "stress resistant" (Anthony, 1987; Bolig & Weddle, 1998). This emphasis on individual invulnerability is problematic in several ways. First, the idea of individual invulnerability is "antithetical to the human condition" (Felsman & Vaillant, 1987, p. 304). No one is either resilient or vulnerable all of the time. Second, focusing exclusively on within-person factors obscures the ecosystemic context of resilience (Bronfenbrenner, 1986; Jessor, 1993; Walsh, 1998).

The implication is that "resilient persons grew themselves up...they either had the 'right stuff' all along...or acquired it by pulling themselves up by their bootstraps" (Walsh, 1998, p. 6). Dannefer (1984) referred to this as the "ontogenetic fallacy in developmental psychology...[that is] the con-

ception of human development as a process of [individual] maturational unfolding" (p. 103) rather than an outcome of the reciprocal interaction between the individual and the environment (Bronfenbrenner, 1977).

A third problem with the idea of intrinsic "hardiness" is that it spawns a contemptuous view of individuals, families, and communities as "deficient, weak, and blameworthy when they can't surmount their problems on their own" (Walsh, 1998, p. 6). Ryan (1971) labeled this tendency to pathologize suffering as "blaming the victim," and pointed out how it has been used to portray the social problems of ethnic minorities as their own fault, rather than recognizing society's responsibility in the formation and maintenance of social problems. An example is the social work literature related to Indigenous People,* which historically has been almost exclusively problem-focused (Waller, Risley-Curtiss, Murphy, Medill, & Moore, 1998).

Walsh (1998) proposed that the American mainstream's intolerance for suffering is a product of the American ethos of the "rugged individual," (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985), the legacy of European-American immigrants who adapted by "cutting their losses" and boldly forging ahead. She suggested that this tendency is evidenced in "popular movements for so-called 'survivors' or 'adult children of dysfunctional families' [that] have spared almost no family from accusations of failure" (p. 15). Similarly, Saleebey (1997) maintained that European Americans "have turned victimhood into a thriving and rapidly expanding business. Many of us, prodded by a variety of gurus, swamis, ministers, and therapists are in hot pursuit of our wounded inner children and find ourselves dripping with the residue of the poisons of our family background" (p. 4).

Fourth, as Freire (1973) has pointed out, the contemporary European-American reification of independence, dominance, and mastery fosters "paternalism and subjugation of the knowledge and wisdom of the oppressed" (p. 79). It also invalidates world views that prioritize the well-being of the collectivity over independence and individual advancement. For example, within traditional Diné culture ("Diné," roughly translated as "The

*The terms Indigenous People or First Nations People describe North American tribes more accurately than "Native Americans" or "American Indians," both of which are misnomers, as has been elaborated by Yellow Bird (1999).

People," is preferred to "Navajo," one of the many names imposed upon the Diné by outsiders [Locke, 1992]), respect for *ke'e*, or kinship and fulfilling one's obligation to the community, is essential to the maintenance of *hozho*, or individual and community harmony. Interdependence and cooperation are givens, and individual standing in the community is largely related to the extent to which a person is helpful to others. To be Diné is to fulfill one's responsibilities to one's relations. This is why one of this culture's harshest forms of retribution is telling a wrongdoer: "You act as if you have no relatives" (Austin, 1993).

RISK AND PROTECTIVE FACTORS

An important contribution of prevention research during the 1980s was the identification of risk factors (Fraser, 1997), thought to be associated with later psychosocial problems (e.g., alcoholism, drug abuse, teen pregnancy, delinquency, school dropouts) (Jessor, 1993). Risk factors are influences, occurring at any systemic level (i.e., individual, family, community, society), that threaten positive adaptational outcomes. By contrast, protective factors are thought to facilitate positive outcomes by operating as buffers between individuals and the risk factors impinging on their well-being. Recent research suggests that the right combination of protective influences can outweigh the neg-

ative impact of exposure to multiple risk factors (Werner & Smith, 1992). The protective factors most often identified in the research are listed in TABLE 1, and have been elaborated on elsewhere (Benard, 1991; Felix-Ortiz & Newcomb, 1995; Fraser, 1997; Matsen & Coatsworth, 1998; Miller, 1999; Miller & MacIntosh, 1999).

Defining Resilience

One of the primary challenges for resilience researchers has been achieving consensus on definition (Richman & Bowen, 1997). Resilience, simply stated, is positive adaptation in response to adversity. Adversity is typically indexed by two categories of risk factors: 1) challenging life circumstances (racism, parental drug use, etc.) and 2) trauma (experiencing family or community violence, death of a parent, etc.) (Matsen & Coatsworth, 1998).

Resilience is not the absence of vulnerability. As stress researchers have determined, many stressful conditions are inescapable and enduring, as are their consequences, be they biophysical, psychological, familial, or societal (Katz, 1997; Lazarus & Folkman, 1984). Moreover, resilience is not an inherent characteristic of individual personality. Given the bidirectionality of the relationship between person and environment, individuals influence adverse life situations as well as being

Table 1
PROTECTIVE FACTORS ACROSS ECOSYSTEMIC LEVELS

INDIVIDUAL FACTORS	FAMILY FACTORS	EFFECTIVE CURRICULA/TEACHING/COUNSELING
Active, easy, outgoing temperament	Competent parent(s)	Focus on instilling self-esteem, personal responsibility, goal setting, clear communication, problem-solving
Reflectiveness	Model competent behavior	Collaboration between family & school
Positive responsiveness to others	Provide access to knowledge	Free lunches
Appealing to adults	Resilience	Mentoring initiatives
Sense of humor	Self-efficacy	Rites of passage programs
High intelligence	Authoritative parenting style	Sense of community
Problem-solving skills	Interpersonal warmth	Community well-being, stability, cohesiveness
Emotional regulation	Noncritical	Availability of prosocial role models, norms, values
Verbal/communication skills	Value children's accomplishments	Supportive friends, neighbors
Realistic appraisal of the environment	High but realistic expectations of child	Employment opportunities
Self-efficacy	Educational attainment	Opportunities for belonging & meaningful involvement in prosocial school, sports, religious, community activities
Self-worth	Reading to children	Well-delineated community
Hopefulness	Involved in schools	CULTURE/ETHNIC IDENTITY
Recognized talents/accomplishments	Connections to other competent adults	Strong, positive ethnic identity
Trust in people as resources	Family cohesion	Resistance to oppression/ethnic activism
Social skills	Socioeconomic advantages	Identification w/traditional beliefs/values
Competence in normative roles	Religious faith/affiliation/participation	Participation in traditional practices
Empathy	Marital harmony	Racial/ethnic socialization
Self-confidence	Children have family/household duties	
Strong, positive ethnic identity	COMMUNITY FACTORS	
Faith/religious affiliation	Adequate resources for child care, nutrition, health care	
Religious participation	Good schools	
Educational aspirations/school commitment	Clear rules	
Sense of direction or purpose		

influenced by them (*Bronfenbrenner, 1979*). Additionally, resilience is not static. At different points in time, a particular individual may respond very differently to the same or similar stressors. Likewise, a given individual may be resilient in response to one adverse life event, yet vulnerable in relation to another.

Pervasiveness, Durability, and "Pile-Up"

Risk and protective factors tend to be pervasive (*Matsen et al., 1999; Rutter & Rutter, 1993*); a person confronting adversity in one context is likely to be confronting adversity in other areas as well. For example, a child growing up in a high-crime area is likely to attend a school with inadequate resources and to be contending with additional hardships. Alternatively, a child growing up in a safe community is likely to attend a school with many resources, and to have other advantages as well.

It also appears that exposure to multiple risk factors poses significantly greater threat to positive adaptational outcome than exposure to only one such factor. Further, the presence of multiple stressors seems to exacerbate the impact of a given individual stressor (*Rutter, 1979*). Smokowski (*1998*) posited that "links between different risk variables often occur, forming *risk chains*. Poverty, for example, commonly coincides with parental unemployment, single-parent households, high parental stress, lower educational attainment, and a complex array of other risk factors" (p. 338). Similarly, links between protective variables can form *protective chains*. Disadvantages and advantages also tend to be enduring (*Rutter, 1993, Rutter & Rutter, 1993*). For example, an infant who is challenged by a given constellation of hardships (e.g. poverty, violence in the family) is likely to be confronted by these same hardships during early, middle, and high school years. This holds true for protective factors, as well.

The negative impact of risk factors also seems to be cumulative. For example, in a study of risk factors within families (i.e., marital discord, poverty, overcrowding, paternal criminality, maternal psychiatric disorder, and foster placement), *Rutter (1979)* observed that children who were exposed to only one of these risks fared as well as children who were not exposed to any, whereas children who were exposed to four of these risks were ten times more likely to develop psychiatric disorders. *Barocas, Seifer, and Sameroff (1985)* also found

that exposure to multiple risk factors significantly affected children's social and intellectual development.

While a "pile up" of risk factors is associated with negative outcomes, it appears that the right combination of protective influences can outweigh the negative impact of exposure to multiple risks—and can lead to positive outcomes (*Werner & Smith, 1992*). For example, having parents who are effective advocates, having special talents, and attending a school with adequate resources and flexibility can offset the risk associated with a child's learning disability (*Katz, 1997*). In fact, it appears that if reasonably good resources are present, outcomes are generally good, even in the context of severe stressors (*Matsen et al., 1999*).

The Ripple Effect

A synthesis of findings in resilience research also seems to suggest that a given risk/protective factor can have a "ripple effect," leading to further risk or protection. *Terr (1990)* found that healthy children exposed to repeated traumatizing experiences may stop seeing themselves as healthy, and may begin to perceive themselves as "bad" children who are deserving of the abuse they are experiencing. *Terr* posited that these children may, over time, give up on themselves and come to feel "futureless." A potential consequence is a sense of hopelessness, helplessness, and despair, which *Garbarino (1994)* referred to as "terminal thinking," and which can lead to further negative appraisals and behavior. Alternatively, a protective influence, such as an encouraging mentor, can engender optimism that may, in turn, further protect by predisposing the individual to optimistic appraisals and constructive behavior. This may result in greater competence, and thus spawn further gains in optimism, confidence, self-efficacy, and so on.

Threat or Challenge?

It should be noted that risk and protective factors are not dichotomous categories. For instance, a risk factor can become protective when a person responds to adversity by developing new competencies and perspectives that lead to more effective coping in the future. Moreover, the same circumstances might constitute risk in one situation and protection in another. For example, divorce may put one person at risk, while protecting another (e.g., in the latter case, a person with adequate

supports who is leaving an abusive relationship). Alternatively, a given individual may experience divorce as both threat and challenge. Similarly, social support from peers can be a protective factor, but might also be a risk factor if the supportive peer group pressures the individual to participate in self-destructive behavior.

RESILIENCE IN ECOSYSTEMIC PERSPECTIVE

There is growing recognition that resilience is multidimensional and multidetermined, and can best be understood as the product of transactions within and between multiple systemic levels over time (Walsh, 1998). The relationship between human beings and adversity is neither linear nor unidirectional. Risk and protective factors may be biological, psychological, social, spiritual, environmental, or any combination of these (Ashford, LeCroy, & Lortie, 2000). They may occur within the individual (e.g., neurobiological disorders, cognitive skills), within the family (e.g., parental alcoholism, role flexibility), within the community (e.g., dangerous neighborhoods, self-help groups), or within larger social and environmental systems (e.g., poverty, racism, affirmative action legislation).

The ecological balance of interacting systems in our lives is dynamic (Germain, 1991). It is constantly changing as individuals and larger social systems are bolstered by good fortune and challenged by adversity. Similarly, protective factors and risk factors within a given ecosystem are dynamic; they are not fixed attributes (Rutter, 1987). Rather, their effect is evident only in the context of their interaction, the larger context in which this interaction occurs, and the meaning of a particular factor to a given individual. For example, while gender influences the effect of stress on adjustment, the effect of gender varies with age. While most studies find that boys are more vulnerable than girls to stressful life events such as divorce in early and middle childhood, in adolescence the reverse is true (Smith & Carlson, 1997). Adolescent girls report more adverse life events than boys, appraise these events as being more stressful, and react to them more negatively (Compas & Bond, 1989).

Both threatening and protective influences can originate from internal or external sources or from a combination of the two. For example, an adolescent's healthy development can be compromised by poor self-esteem and early sexual activity, yet buffered by educational aspirations and the pres-

ence of a caring adult. Although the bulk of resilience research has focused on individual responses to adversity, the concept is now being applied to larger social systems such as families (Walsh, 1998), organizations (Kurzban & Akabas, 1993), and communities (Saleebey, 1997). It is becoming apparent that human systems of any size can, and do, develop in the process of meeting challenges (Fraser, 1997).

Implications for Research and Practice

A holistic, ecosystemic perspective is central to the strengths perspective. From an ecosystemic perspective, individual, family, and community change is not only possible, but inevitable and continuous. The ecosystemic perspective suggests that protective influences can be introduced into an individual's life through any relationship in any part of the ecosystem (personal attributes, family strengths, a high-quality recreation program, social policies promoting education, etc.). Moreover, this positive influence can reverberate throughout the child's ecosystem, further enhancing the possibility of favorable adaptational outcomes.

For many individuals, families, and communities, understanding resilience requires analysis of the impact of oppression. Jessor (1993) noted that research on psychosocial development that ignores conditions of concentrated and chronic adversity (e.g., racism, poverty, limited access to resources) limits our understanding of development in general and of resilience in particular:

Race and ethnicity are linked to major differentials in socially organized access to opportunity...and are inescapably implicated in adolescent self-definitions. [However,] until recently, adolescent behavioral science has been confined largely to White middle-class adolescents [and] has unfortunately allowed issues of race and ethnicity and racial discrimination... and the interaction of poverty with race and ethnicity... to lie fallow. (p.119)

While the impact of oppression on human development has long been recognized in the discipline of social work, it has only recently come to light in the disciplines from which resilience research generally emerges.

A related problem affecting research and practice is the failure to consider resilience and vulnerability in the context of culture and class. For example, life circumstances that are normative in nondominant sociocultural contexts may be mistakenly considered by middle-class, European-American researchers to be pathogenic risk factors. Viewing the person/risk factor relationship as

separate from the cultural context can have the unfortunate consequence of leading mainstream researchers to pathologize whole populations. Catterall (1998) termed this phenomenon "risk by association," that is, "the tendency in academic and professional discourse to equate *risk* with *membership* in any of a number of disadvantaged societal groups" (p. 303, *emphasis added*). He cautioned:

While researchers...would hardly agree that all members of the risk groups they target are truly "at risk," there is a tendency in the framing of their analyses to equate risk with group membership. Much education research and policy scholarship reinforces this view. When average achievement and attainment measures are displayed by income level, race, ethnic origin, or language skills, the effect can be to label whole groups of students "at risk" rather than identify for attention those who are experiencing actual difficulties in performance or social integration....Another effect of group labeling is that through stereotyping, expectations for entire groups may be suppressed, with unfortunate educational consequences (pp. 304-305).

Global, unitary formulations are particularly problematic when findings based on middle-class, European-American samples are inappropriately generalized to other populations. For instance, poverty, numerous siblings, and having parents with minimal education are frequently cited risk factors thought to impede development. Researchers have suggested that these factors make parents less available to their children, thereby disrupting the caregiving process (Rak & Lewis, 1996). However, in many communities, among the Diné for example, poverty, large families, and having parents with minimal education constitute the life circumstances of the vast majority of children. Are we to assume, then, that the caregiving process in Diné families is "disrupted," and that Diné parents do not provide adequate structure and love for their children? Although it is clearly inappropriate to generalize such findings across cultural contexts, this remains a common error in mainstream social science.

Catterall (1998) also pointed out that global characterizations of groups or classes of people (e.g., "the culture of poverty," "the underclass") obfuscate differences within groups and overlook individuals who do not conform to stereotypes. Accordingly, "risk by association" negatively affects social science research by creating "a web of pessimistic expectations of and predictions" about individuals and their environments (Saleebey, 1997, pp. 5-6). Moreover, such generalizations may alienate clients from professional helpers and, as Freire (1973) cautioned, may also alienate clients from

themselves, their cultures, or faith in their own potential. Such characterizations can be a pernicious form of ideological racism, more devastating in its effect because it is presented as "scientific knowledge" by social scientists and health care professionals. For this reason, social science researchers need to attend to strengths, potentials, supports, and resources (personal, social, and institutional) to offset the "excessive and often unequivocal pre-occupation with risk that tends to homogenize and caricature those who are poor" (Jessor, 1993, p. 121).

As researchers and practitioners have become increasingly aware of the complexity of human resilience, studies have evolved from cross-sectional examinations of single risk factors to prospective designs examining multiple and cumulative risk and protective factors (Hawkins, Catalano, & Associates, 1992; Matsen et al., 1999). Matsen et al. underscored the present need for longitudinal, multivariate analyses that will more closely reflect multidimensional aspects of adaptation over time, as well as the cumulative nature of risk factors.

Naturalistic, participatory, ethnographic approaches are particularly well suited to the study of human resilience. While the knowledge base of resilience research can be greatly enriched by empirical observational methods, narrative approaches that tap into subjective experience may reveal protective factors not apparent even to participant-observer researchers. As narrative therapists have demonstrated (White & Epston, 1989), stories (of individuals, couples, families, communities, tribes, etc.) are like rich archaeological digs. Personal narratives may illuminate protective factors (active or latent) in parts of a respondent's ecosystem that might not be readily apparent to researchers. For example, a child's stress may be buffered by the continuing ripple effect of a nurturing, supportive teacher years after the child was actually in that teacher's class.

Subjective, narrative accounts are also useful because of the dynamic nature of both risk and protective factors, and because a given individual moves back and forth along the resilience-vulnerability continuum. Accordingly, the most up-to-date resilience-vulnerability picture is likely to be the respondent's own "take" on his or her situation at a given point in time. Furthermore, ethnographic, narrative approaches to studying resilience are consistent with current knowledge in both coping and social support research. Subjec-

tive perspectives of individual respondents, that is, *appraisal* of stressful life events and *perception* of social support are recognized as important mediators of psychological distress and predictors of adaptational outcome (Lazarus & Folkman, 1984). For this reason, contemporary researchers view subjective perceptions as the best proxy for the overall constructs of stress and social support. Similarly, subjective accounts are critical to our understanding of resilience.

CONCLUSION

The study of resilience is evolving from static, individualistic conceptualizations, to an appreciation of the complex relational and contextual aspects of positive adaptation in the face of adversity (Rutter, 1987). The current challenge for resiliency researchers is to discover the conditions under which *anyone* might rebound or regenerate (Benard, 1991; Garmezy, 1994). While everyone has the potential to be resilient, this potential can be activated by introducing interventions that reduce or alter adverse relationships (Rutter, 1987) and establish or strengthen protective ones (Werner & Smith, 1982). An essential first step in this process is taking a respectful and collaborative approach to recognizing—and building on—existing individual, family, community, cultural, and spiritual resources (Waller & Patterson, *in press*).

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