Social Resilience

The Value of Social Fitness With an Application to the Military

John T. Cacioppo   *University of Chicago*
Harry T. Reis   *University of Rochester*
Alex J. Zautra   *Arizona State University*

Resilience has been regarded narrowly as a quintessential individual property by most investigators. Social resilience, however, is inherently a multilevel construct, revealed by capacities of individuals, but also groups, to foster, engage in, and sustain positive social relationships and to endure and recover from stressors and social isolation. Emergent levels of organization, ranging from dyads, families, and groups to cities, civilizations, and international alliances have long been apparent in human existence, but identifying the features of individuals, relationships, and group structures and norms that promote social resilience—and determining effective interventions to build social resilience—represent some of the most important challenges facing the military as well as contemporary behavioral science. We identify nine personal resources that foster social resilience, and we describe an educational, computer-based program that builds on these resources in an effort to improve the social resilience among troops in the U.S. Army. Data from this program should provide valuable evidence regarding the challenge of building social resilience.

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In our Scripture, it is written that when you do not have hope, you look for it in the face of your friend.
—Gazan man quoted by Gordon (2009)

On January 3, 1864, the *Grafton*, an English schooner piloted by Captain Thomas Musgrave, was struck by a hurricane that broke its anchor chains and sunk it on the rocky beach on the southern end of Auckland Island. The captain and his crew of four men made it to shore but not to safety. Auckland Island is one of the most inhospitable places on earth, with freezing rain, howling winds, and little to eat year round.

On May 10th of the same year, the *Invercauld*, an Aberdeen clipper piloted by Captain George Dalgarno, was struck by a heavy gale and driven between two steep cliffs on the northern side of Auckland Island and sunk. Nineteen of the twenty five men aboard the *Invercauld* made it ashore, unaware of the existence of the other crew despite their spending more than a year together on the desolate and inhospitable island.

The survivors of the *Grafton* abandoned formalities from the past and adopted group problem solving and decision making, whereas the survivors of the *Invercauld* retained the formal hierarchy that served them so well on the high seas. Although the challenges to survive were quite similar, the outcomes for these two crews could not have been more different. The crew of the *Grafton* worked together to find food and water, consulted with and looked after one another, constructed shelter, and contributed to their rescue by building a vessel and setting out to sea where they were found by Captain Cross of the *Flying Scud*. The crew of the *Invercauld*, on the other hand, fought and splintered, lost 16 of the 19 to cold or hunger, descended into cannibalism, and was found only by chance. The *Julian*, a Peruvian ship, had sprung a leak off the island and set a boat ashore to seek assistance. There they found and rescued the three remaining crew members of the *Invercauld* (Druett, 2007).[1]

We may aspire to be self-sufficient and celebrate our individual achievements, but our remarkable accomplishments as a species are attributable to our collective action, not our individual might. Human evolutionary heritage has endowed us with the capacity to feel the pain of social isolation and the rewards of social connection. Importantly, it has also endowed us with the capacity to feel others' social pain and the compassion to care for the sick and the elderly far beyond their reproductive or instrumental utility. Social species generally do not fare well when forced to live solitary lives, and we are certainly no exception. Humans, born to the longest period of utter dependency of any species and dependent on conspecifics across the life span to survive and prosper (Cacioppo & Patrick, 2008; Hartup & Stevens, 1997), do not fare well when living solitary lives or when it simply feels that way. Social isolation is associated not only with lower subjective well-being (Berscheid, 1985; Burt, 1986; Myers & Diener, 1995) but

John T. Cacioppo, Department of Psychology, University of Chicago; Harry T. Reis, Department of Psychology, University of Rochester; Alex J. Zautra, Department of Psychology, Arizona State University.

[1] We thank William Patrick for suggesting this example of social resilience.

The significance of social groups in the design of human societies is highlighted by multilevel selection theory (Wilson, Van Vugt, & O'Gorman, 2008). This theory proposes that "early human evolution represented a major transition, turning our ancestral groups into the primate equivalent of bodies or beehives" in which well-functioning social groups had significant adaptive advantages over "mere individuals and less coordinated groups" (Wilson et al., 2008, p. 7). Attributes such as the empathic response (DeWaal, 2009), which enhanced participation and coordination in social groups, thereby became part of the human genome. Consistent with this thesis, extensive evidence demonstrates that relationships exert pervasive influences on human behavior and development throughout life (Reis, Collins, & Berscheid, 2000). The same may be said of groups and collectives.

Social resilience applies to nearly all forms of human association, from dyads of all types, to families, small groups, neighborhoods, communities, and cultures. Although social resilience is most commonly studied in the context of smaller units (e.g., dyadic relationships within families), the construct is intended to apply across all of the interpersonal groupings that are relevant to responding effectively to contemporary challenges and opportunities. For example, when Sarason (1974) wrote of the "sense of

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collaborative problem solving and increasing the frequency of interactions that promoted acceptance and bonding among the survivors. Self-serving or antisocial behaviors, when and if they occurred, would be extinguished. In contrast, the rigid hierarchy of the *Invercauld* discouraged prosocial behavior, inhibited empathy, caring, and shared problem-solving, and made it unlikely that a sense of "we-ness" would emerge. Social resilience, therefore, is a *multilevel construct* because it represents a feature of groups as well as a feature of the individuals in the group.

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Embarking on programs to enhance social resilience means departing from the usual ways of thinking about the problems of people in three fundamental ways. First, the term itself emphasizes strengths that encourage patterns of positive adaptation rather than sources of vulnerability that place people at risk (Masten & Wright, 2009). In this way, resilience research shares some of the features of positive psychology (Seligman, Steen, Park, & Peterson, 2005) but without the risk of overattention to the positive when put into practice. Second, stressful experiences are inherently tied to the formulation, so that interventions to promote resilience need to be designed with specific sources of adversity in mind and with attention to the nonlinear dynamics of coping with and adaptation to that adversity (Zautra, Hall, & Murray, 2008). Third, the "social" in social resilience widens the angle of the researcher's lens from a focus on individual capacities to the examination of ways to build more adaptive social ecologies for people, groups, organizations, and communities.

As we have noted, this reorientation to the social systems that underlie individual fitness is by necessity multilevel and calls for interventions that extend the met-aphor of personal fitness to adaptive relationships among peoples and the governance of groups. Indeed, one of the outstanding features of resilience is that it can be thought of as a systemic process (or processes) inherent in virtually any type of organized entity, from a simple biological system to a person, an organization, a neighborhood, a community, a city, a state, or even a nation (Zautra & Reich, 2011). In essence, social resilience represents a paradigmatic shift in our ways of thinking about people and their problems and thus requires a fresh look at the design of interventions to promote the kinds of qualities that increase the likelihood of resilient outcomes.

How might one apply these ideas in an intervention program? We use the idea of trust to illustrate how this might be done generally (see Table 2). We then address specifically how social resilience has been implemented thus far in the U.S. Army's Comprehensive Soldier Fitness program.

At the level of neurophysiology, researchers target oxytocin and various mechanisms of social reward such as dopamine and endorphin receptor densities, and they may inspect the size and integrative signaling of the anterior insula and cingulate, the amygdala, and prefrontal cortex (e.g, Uchino, Cacioppo, & Kiecolt-Glaser, 1996; Uvnäs-Moberg, Arn, & Magnusson, 2005). Clinicians may inquire of the capacities of these neural systems to deliver signaling that provides for the foundation for social relatedness, and empathy, and may review pharmaceutical alternatives to treat deficiencies. These approaches have value, but alone, they miss the broader vision needed to advance social resilience. Personality assessments would focus on attention to socioemotional intelligence attributes such as self–other awareness and perspective taking and also attributes of secure attachment such as empathy, generosity, social connection, and intimacy, as shown in Table 1 (Simpson, 2007). Therapeutic and other instructional forms of intervention such as life coaching (Hart, Blattner, & Leipsic, 2001) and seminars could advance individuals' capacities for trust, but again, these approaches do not directly attend to the relationships themselves that give rise to trust and distrust.

Small units, whether in combat, in the office, or at home, represent social entities with system dynamics that may encourage or discourage trust among their members. Acceptance of diversity, mutuality, sharing of resources, commitment, and generativity are some of the attributes of small groups with a high trust quotient. A social network analysis of these small groups provides the basis for an understanding of communication gaps and sources of misunderstanding but also the unique strengths of strong ties within groups that can facilitate the growth of social fitness (Reis et al., 2000). Processes and patterns of relationship are the focus, with attention to the positive as well as the problematic in the assessment and advocacy for growth and advancement. For example, "forgiveness" methods have been advocated for use with families to aid recovery and release constraints on the positive feelings that family members with a history of troubled relations still may have

Tab e 2
Enhancement of Trust Across Multiple Levels of Analysis

Level of analysis	Sample constructs	Illustrative assessment/intervention approaches
Neurophysiology	Neurochemistry: oxytocin, dopamine, endorphin receptor density Neurological substrates: anterior insula/cingulate, amygdala	Assessment of neurophysiological capacity for positive social relations Pharmacological treatment
Individual	Interpersonal awareness, perspective-taking, connection, generosity, and empathy	Assessment of emotional intelligence Training in empathy, social awareness, social skills, and attention to relationship strengths
Families/small combat units	Acceptance of the diversity of life-style choices, mutuality, sharing of resources, generativity	Family interaction and social network analyses Family therapy to resolve conflicts and restore mutuality Social interventions to enhance communication Diversity training to foster inclusion and reduce isolation
Communities/battalions	Collaborative ties, reciprocity, fairness, justice, impartiality, leadership	Assessment of social capital, distribution of resources, diversity Interventions focused on group identity, strength-based initiatives, and grass-roots collaboration fostering community development and sustainable and inclusive social networks

ate leadership. These qualities are thought to describe the amount of social capital available to develop and sustain communities through adversity (Coleman, 1990; Klinenberg, 1999; Putnam, Felstein, & Cohen, 2003). One important difference between military and civilian communities, for example, the battalion versus a neighborhood, is that members of combat units migrate in and out more quickly yet share a stronger social identity and unified sense of purpose compared with other groups. The transient nature of these groups presents a special challenge to creating social resilience. At the same time, the common collective identity presents a special opportunity. In the military, leadership training, promotion of values of fairness and social responsibility throughout, emphasis on the valued social identity they share, and close attention to military discipline and hierarchies promote a coherent sense of community. The new attention to resilience training in the Army is an example of system-wide reform aimed at providing a greater understanding of the fundamental ingredients of a successful military experience, getting beyond survivorship and individual advancement, and including camaraderie and good stewardship (Hames, 2009). The outcome of those efforts will depend, of course, on implementation of assessment and interventions on systemic influences as well as the training of recruits.

There are a number of examples of community approaches to social resilience. In the Experience Corps (Fried et al., 2004), retired senior citizens help young children within inner-city schools. The seniors are provided a way to participate meaningfully in bettering the lives of children in their community. In turn, the children have a surrogate, caring grandparent who watches over them during part of the school day. The Health in a New Key program (St. Luke's Health Initiatives, 2008), the Healthy Communities Initiatives by the World Health Organization (1997), as well as the National Civic League's All-American Cities awards and its development of the Civic Index (National Civic League, 1999) all reformulate health as the presence of social strengths to aid in recovery from illness and sustain well-being.

Family therapists recognized long ago that the restoration of hope in social units does not succeed through exclusive attention to alleviation of psychological distress from ongoing conflicts; it is also critical to broaden the family's perspective on the sources of social goods within the family in spite of its troubles (e.g., Dattilio, 2005; Minuchin, Lee, & Simon, 1996). On a broader scale, social connectedness and cohesion are linked to greater vitality and stability in communities (Langdon, 1997), and indicators of social capital have been associated with beneficial health outcomes (Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997; Veenstra et al., 2005). In contrast, inequality and prejudicial treatment are associated with poorer health and life expectancy (Mays, Cochran, & Barnes, 2007).

The social resilience component of the Comprehensive Soldier Fitness program includes four 15-minute modules developed on the nine personal resources outlined in Table 1. Although each module draws on more than one of the resources in Table 1, each module was designed to stimulate an awareness of and an appreciation for one or more

"research" in it because such efforts are more likely to succeed when the translation of the basic research to an applied problem is part of a research program that includes randomized control studies, evaluation of treatment efficacy, and iterative revision of the program to improve its

life course. *Psychological Bulletin, 121,* 355–370. doi:10.1037/0033-