University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Management Department Faculty Publications

Management Department

2006

Developing the Psychological Capital of Resiliency

Fred Luthans *University of Nebraska - Lincoln,* fluthans 1@unl.edu

Gretchen R Vogelgesang *University of Nebraska - Lincoln*, gretchen.lester@sjsu.edu

Paul B. Lester
University of Nebraska-Lincoln, paul.b.lester.mil@mail.mil

Follow this and additional works at: https://digitalcommons.unl.edu/managementfacpub

Part of the Business Administration, Management, and Operations Commons, Management
Sciences and Quantitative Methods Commons, and the Strategic Management Policy Commons

Luthans, Fred; Vogelgesang, Gretchen R; and Lester, Paul B., "Developing the Psychological Capital of Resiliency" (2006). Management Department Faculty Publications. 152. https://digitalcommons.unl.edu/managementfacpub/152

This Article is brought to you for free and open access by the Management Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Management Department Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Nebraska Lincoln digitalcommons.unl.edu

Published in *Human Resource Development Review*, vol. 5, no. 1 (March 2006), pp. 25-44, doi 10.117711534484305285335 Copyright © 2006 SAGE Publications. Used by permission.

Developing the Psychological Capital of Resiliency

Fred Luthans, Gretchen R. Vogelgesang, and Paul B. Lester

University of Nebraska-Lincoln

Abstract

In these turbulent times, we propose the importance of developing the psychological capital dimension of resiliency. After providing the theoretical background and meaning of psychological capital in general and resiliency in particular, the authors present proactive and reactive human resource development (HRD) strategies for its development. The proactive HRD includes increasing psychological assets, decreasing risk factors, and facilitating processes that allow human resources to enhance their resilience. The reactive HRD largely draws from a broaden-and-build model of positive emotions and self-enhancement, external attribution, and hardiness. The article includes specific guidelines for HRD applications and an agenda for future needed research.

Keywords: resiliency, resilience, psychological capital, resiliency development in HRM

According to a recent Bureau of Labor Statistics report, average Americans will hold more than 10 jobs during their lifetime. These job changes may not always be voluntary, with role redesign, job reengineering, layoffs, downsizing, rightsizing, and furloughs becoming commonplace. If individuals and organizations are to successfully navigate these turbulent times, the development of resilience (i.e., the ability to "bounce back" from adversity or personal setbacks) seems imperative (Hamel & Valikangas, 2003). Rather than continually reacting to the trauma of these times, we propose that human resource (HR) professionals and departments need to invest in and develop psychological capital, in general, and resiliency, in particular (Luthans,

-

2002a, 2002b, 2003; Luthans, Luthans, & Luthans, 2004; Luthans & Youssef, 2004; Luthans, Youssef, & Avolio, in press; Youssef & Luthans, 2005).

Psychological capital or simply, PsyCap, is an outgrowth of positive psychology (Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002) that charged we should look at what is right with people instead of the almost singular focus of what is wrong and/or dysfunctional with people and, when applied to the workplace, is referred to as positive organizational behavior or POB (Luthans, 2002a, 2002b, 2003). This newly emerging POB is defined as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002b, p. 59). Thus, to be included as part of POB, the following criteria must be met: (a) positive, strength-based, and relatively unique to the organizational behavior field; (b) theory and research-based with valid measures; and, most important for HRD, (3) state-like and thus open to development and performance management. Along with several other positive psychology constructs, resiliency has been determined to meet these POB criteria (Luthans, 2002a; Youssef & Luthans, 2005), and especially for HRD purposes, is considered to be state-like and thus open for development and change (Luthans, 2002a; Masten, 1994, 2001; Masten & Reed, 2002; Youssef & Luthans, 2005).

PsyCap is a core construct of positive organizational behavior and is defined as "an individual's positive psychological state of development that is characterized by the following: (a) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (b) making a positive attribution (optimism) about succeeding now and in the future; (c) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (d) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success" (Luthans, Youssef, & Avolio, in press). This operational definition differentiates PsyCap from both widely recognized human capital (i.e., what you know, e.g., knowledge, skills, abilities, and experience, see Van Marrewijk & Timmers, 2003) and social capital (i.e., who you know, e.g., the network of relationships, see Adler & Kwon, 2002; Wright & Snell, 1999), to "who you are" (Luthans et al., 2004; Luthans & Youssef, 2004) and "what you can become" (Avolio & Luthans, 2006; Luthans & Avolio, 2003).

Analogous to traditional economic capital, as defined here, PsyCap is open to investment and development for the return of performance improvement and competitive advantage. The strengths and/or capacities that have been determined to best meet the operational definition of PsyCap are the well-known positive psychology constructs (but generally ignored in organizational behavior) of confidence and/or self-efficacy, hope, optimism, and resiliency (Luthans, 2002a). In the HRD arena, although self-efficacy (e.g., see Bandura, 2000; Gist, Stevens, & Bavetta, 1991; Mager, 1992), optimism (e.g., Seligman, 1998), and hope (e.g., Luthans & Jensen, 2002) have received some attention, to date, resiliency has been only indirectly addressed.

Key to the application of resiliency to HRD is that it has state-like properties. Although resiliency has traditionally been portrayed as trait-like and therefore relatively fixed (you either have it or you do not; see Block, 1961), there is increasing evidence that it is in fact developable (Bonanno, 2004; Masten, 1994,2001; Masten & Reed, 2002; Youssef & Luthans, 2005). In this article, we propose to select not only individuals who exhibit resilience but also implement programs to develop resiliency in existing employees. Empirical evidence has shown that there are multiple methods for building resiliency (e.g., using positive emotions; see Tugade & Fredrickson, 2004), altering the levels of risk or assets (Masten, 2001), and fostering self-enhancement (Greenwald, 1980; Taylor & Brown, 1988). Individuals who are resilient show more emotional stability when faced with adversity (Bonanno, Papa, & O'Neill, 2001), are more flexible to changing demands, and are open to new experiences (Tugade & Fredrickson, 2004). We suggest that HRD can utilize this expanding body of knowledge to create a multipronged approach for developing a more resilient workforce.

The purpose of this article is to first provide the theoretical grounding and precise meaning of resiliency, as well as to integrate the applications from other fields of research. Specific attention is given to how the other psychological capital factors of hope, optimism, and confidence and/or efficacy differ from resiliency. Then, in the balance of the article, both proactive and reactive strategies for developing the resiliency of today's human resources are provided. Specific future research directions and application guidelines are offered.

Theoretical Underpinnings and Meaning of Resiliency

Although resiliency was most often discussed many years ago as a rare personality trait related to adaptability and coping (Block, 1961), the current conceptualization of resilience as a state emerged in the 1970s from research on schizophrenic mothers and their children (Garmezy, 1971, 1974; Masten, Best, & Garmezy, 1990). Clinical researchers found that while some of these children were not able to overcome such adversity and continued to be disadvantaged throughout their lives, a significant number of others were able to overcome and bounce back from their devastating childhoods to lead healthy, productive lives. A number of studies through the years employing varied populations, situational characteristics, and outcome variables, have confirmed that resilience is not a rare phenomenon (Garmezy, 1971; Luthar, 1991; Masten & Coats worth, 1998; O'Dougherty28 Human Resource Development Review / March 2006 Wright, Masten, Northwood, & Hubbard, 1997; Rutter, 1979; Werner & Smith, 1982, 1992).

This extensive clinical research also established that both external (contextual) and internal (psychological) characteristics influence one's capacity for resilience (Luthar, Cicchetti, & Becker, 2000; Masten et al., 1990; Werner & Smith, 1982). Although there is not an agreed upon taxonomy of the situations or traits necessary to activate resilience, there is sufficient evidence showing the existence of a dynamic psychological capacity of adaptation and coping with adversity (Masten, 2001). A recent metatheory of resiliency identified three waves of inquiry and analysis: (a) identifying resilient qualities of individuals and support systems that predict social and personal success; (b) understanding the process of coping with stressors, adversity, change, or opportunity resulting in the identification, fortification, and enrichment of protective factors; and (c) identifying the motivational forces within individuals and groups and the creation of experiences that foster the activation and use of these forces (Richardson, 2002).

Positive psychologists have embraced resiliency as a prime example of what is right and good about people. For example, Masten and Reed (2002, p. 75) define resiliency as "a class of phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk." A common theme in both clinical and positive psychology is that although resiliency may be dispositional and trait-like, there is considerable evidence that it is also state-like and open

to development (e.g., Coutu, 2002; Maddi & Koshaba, 1984; Reivich & Shatte, 2002). For example, in a recent news article on the power of resiliency, positive psychologist Karen Reivich stated, "To say something is partly heritable doesn't mean it's not changeable. Research shows people can learn ways to become resilient. They can practice techniques that help them stay in the present, keep things in perspective and work on the problems at hand" (Elias, 2005, p. 2D). Drawing from this theory and research base and meeting the criterion of being state-like and open to development, we have defined resilience as "the developable capacity to rebound or bounce back from adversity, conflict, failure or even positive events, progress, and increased responsibility" (Luthans, 2002a, p. 702) and as stated earlier in our definition of being part of overall PsyCap as "sustaining and bouncing back and even beyond to attain success" (Luthans et al., in press).

Largely drawing from the work of positive psychologist Ann Masten (2001), PsyCap resilience focuses on the proactive assessment of risks and personal assets that affect employee outcomes. Pure risks are defined as any predictor that leads to undesirable outcomes while having no effect if there is no occurrence (Kraemer et al., 1997). For example, pure risks in everyday life could take on the form of a potential illness that leads to the loss of a loved one. However, if a loved one never contracts the illness, the pure risk has no effect on the individual and does not affect his or her resilience. Extending this reasoning to the workplace, pure risks could include macrolevel external threats such as economic instability, or micro-level internal threats such as harassment or missing a career-threatening deadline on a project. These risks are certainly real but may never directly affect certain individuals because their environment may not be affected by such risks.

Conversely, pure personal assets are defined as any predictor that leads to positive outcomes while having no influence if they are absent. Within the workplace, pure personal assets could take on the form of promotions, bonuses, recognition, or mentors hip programs (Masten & Reed, 2002). As with the examples of pure risk above, the same caveat exists for pure assets: if organizational members do not receive the benefit of a pure personal asset, their resilience is not affected. In addition, there is evidence of a risk and/or asset continuum whereby an increase in the intensity of an asset (e.g., a promotion with a big pay increase) will lead to a decrease in the amount of perceived risk (fear of a layoff; Masten, 2001; Masten & Reed, 2002).

We propose that both these risks and assets are an extension of human and social capital-by increasing an employee's access to knowledge, skills, and/or abilities, or by strengthening the social network, risks are decreased and personal assets are increased.

Besides risks and personal assets, another important dimension in the theory-building of PsyCap resiliency revolves around the performance boundary. Some researchers (Gest, Reed, & Masten, 1999; Masten et al., 1999) suggest that resilience leads to a return to normal functioning after an adverse event, whereas others indicate that there may be an increase in performance (Luthar, 1991). In addition, research has indicated that the severity of the adverse event may help determine the performance boundary. For example, most resilient people return to normality after a particularly traumatic event such as September 11th, whereas some resilient people may experience an increase in performance (beyond normal) after a less traumatic event such as job redesign or role restructuring (Luthar et al., 2000). We feel that additional experimentation and interventions are necessary to determine the true performance boundary of resilience, but past work on resilience indicates an individual and organizational performance multiplier may result after adversity.

Another theoretical issue is the convergence and differentiation of resilience in relation to the other PsyCap factors of hope, optimism, and confidence. In terms of convergence, we propose that these other PsyCap factors may act as pathways to resilience (i.e., those who are hopeful, optimistic, and confident are more likely to bounce back from adversity than those who are not). Moreover, hope, optimism, and confidence may moderate the relationship between resilience and outcomes such as performance. On the other hand, resilience is reactive (as opposed to the other factors that are 30 Human Resource Development Review I March 2006 more proactive) and does have an intense stressor antecedent-something that could derail well-being, such as the loss of a job, a poor performance review, or some intense positive event, such as a promotion, with much more personal responsibility and accountability-in order to activate the resiliency process. Therefore, resiliency could actually serve to restore confidence, hope, and optimism after a challenging experience, which suggests that resiliency is an antecedent to other positive outcomes of psychological capital. Thus, although there is some conceptual convergence between resiliency and the other PsyCap factors, the following sections also provide specific differentiation.

How Resilience Differs From Hope

As we have discussed, resilience is the capacity of an individual to respond and even prosper from negative or positive stressful circumstances; whereas hope is defined in positive psychology as the willpower (having positive expectancies and specific goals) and the waypower (having in place alternative pathways to cope with those expectancies not proceeding in the way they were supposed to proceed) people have toward a goal (Snyder, 2000), as a factor of PsyCap persevering toward goals, and when necessary, redirecting paths to goals in order to succeed (Luthans et al., in press). The agency of the effort to succeed, the predetermined alternative pathways to success and reaching goals, are all necessary components of hope (Snyder et al., 1991). The waypower (pathways) dimension of hope resembles resilience in that flexibility is an important component of both, but a key differentiator is that neither component of hope encompasses the reaction to a disruptive event that triggers the resilience process (Bonanno, 2004).

How Resilience Differs From Optimism

Optimism is less closely related to resilience than hope and is defined as a generalized expectancy that one will experience good outcomes in life, which will lead to persistence in goal-striving (Scheier & Carver, 1985) and as a factor of PsyCap, a positive attribution about succeeding now and in the future (Luthans et al., in press). Optimists generally take personal responsibility for the positive outcomes in life, while deflecting responsibility for negative events through an optimistic explanatory (i.e., attributional) style (Peterson, 2000). As with hope, optimism does not take into account the necessity of a trigger event (adversity) as does the definition of resilience (Bonanno, 2005; Masten, 2001). Specifically, resilient individuals are better prepared than optimists to overcome adversity because an optimist, with their positive attribution style, may not delve into the true meaning of adversity and simply brush it off. Moreover, resilient people may take a more strategic and pragmatic approach to dealing with stress than would an optimist and thus be better suited to adapt and overcome it and even go beyond the normal equilibrium level of performance.

How Resilience Differs From Confidence (Efficacy)

As noted, some positive psychology constructs may serve as conduits to develop and/or moderate one's resilient capacity; nowhere is this more apparent than in the relationship between resilience and confidence or efficacy (Prilleltensky, Nelson, & Peirson, 2001). Efficacy, as defined by Bandura (1997), is the belief that an individual has to successfully perform a specific task and as a factor of PsyCap having confidence to take on and put in the necessary effort to succeed at challenging tasks (Luthans et al., in press). Although Bandura (1997) sparingly uses the term *confidence* in his discussions of efficacy, other efficacy theorists do (e.g., see Maddux, 2002). Applied to the workplace, *confidence* is used more commonly (e.g., see Kanter, 2004) and that is why we use the terms interchangeably.

The more confident people are in task accomplishment, the more likely they have a pathway to resilience in which they frame a negative event or failure as a learning experience. For example, Bandura (1997, p. 3) notes that efficacy influences one's "resilience to adversity." Thus, the proactive, process-focused development of resilience relies heavily upon Bandura's conception of efficacy, but the reactive use of resilience draws upon other mechanisms or pathways in order to move past an adverse event. Resilience is what allows people to keep trying, and to restore their self-efficacy even after it has been challenged and predicted to decrease due to a setback (Luthans et al., in press; Youssef & Luthans, 2005).

Resilience as an Overlooked Opportunity for Human Resource Development

Not only are employees experiencing more jobs throughout their lifetime, but they may also be experiencing more stress than at any other time in history. For example, downsizing and resulting lay-offs tend to put more strain and pressure on the remaining employees (i.e., the infamous "survivor syndrome"). Another example would be the increasing use of cell phones, laptop computers, and PDAs, which adds stress by decreasing the amount of downtime an employee has when they are truly away from work. In contrast to workforces throughout the rest of the world that are negotiating for more vacation time, Americans are taking less time off. For example, a recent survey on HRMGuide.

net reported that the average American lost 1.8 vacations days and used 12 fewer vacation days annually than the next lowest country, Japan. These increasing levels of stress and decreasing amounts of recovery time point to the importance of the development of resilience in the workplace.

We have summarized the theory and research that resilience is a dynamic process of positive adjustment to adverse (or intensely positive) conditions, and, relevant to HRD, is state-like and open to development. We have shown in some of our preliminary research that the resilience of workers is related to their performance (Luthans, Avolio, Walumbwa, & Li, 2005) and propose organizations that develop such resilience in their employees will be more adaptive and successful over time (e.g., see Luthar & Cicchetti, 2000; Masten, 1994; Youssef & Luthans, 2005). Also, from an HRD perspective, it is important to note that a bad experience or failure on a task in an individuals' organizational life does not have to be a reason for career derailment. For example, resilient employees may use an adverse experience to increase performance on subsequent tasks and may actually be much more valuable to the organization in terms of their adaptability in times of subsequent change or uncertainty (Hind, Frost, & Rowley, 1996).

We propose two approaches HRD can use to develop resilience. The first is a proactive approach that involves structuring the organization around the anticipation of the need for resilience. In particular, there are three strategies that can help structure the organization to anticipate and facilitate the resiliency of employees. First is the risk-focused strategy that relies on prevention and reduction of risk or stress. Second is the asset-focused strategy that relies on the enhancement of personal and available organizational resources. Third is the process-focused strategy that relies on the cognitive ability of employees (Masten & Reed, 2002; Nelson, 1999; Youssef & Luthans, 2005). HRD can implement these three strategies to proactively head off stress resulting from upsetting negative (or positive) events. This proactive HRD approach to the development of resiliency is given detailed attention below. The second HRD approach to resiliency development, which we view as more reactive, draws from the research of positive psychologist Barb Fredrickson (2001) and her colleagues' broadenand-build model of positive emotions. This approach suggests that it is important to consistently remind people to think positively and to

find meaning when negative events occur to individuals or organizations. Though organizational members may have been trained to do this, they will still look to their leaders for reassurance or reminders to think positively during times of adversity (Fredrickson, 2001). In addition, it is important to note that the term *reactive*, as used in this approach, should not carry a negative connotation as an HRD strategy for resiliency development. Rather, this approach is simply reactive insofar as it is how an individual responds to a negative (or positive) event. Both proactive and reactive HRD strategies become necessary to the development of resilience because we cannot always control the external environment, but we can do our best to anticipate the future. The following provides more detail and specific guidelines for first the proactive and then the reactive HRD strategies for developing resiliency.

A Proactive Approach to Developing Resilience

Adults will typically experience only a few traumatic events in the course of a relatively normal and stable life (Bonanno, 2005). It follows that most people will be able to pragmatically cope with these traumatic events and return to stability in a relatively short time. This is because they understand that these events, such as the death of a loved one, are simply part of their life stream (Bonanno, 2004). Drawing from such work in the clinical field, and drawing from the recent work of positive psychologist Ann Masten (2001; Masten & Reed, 2002), the three areas of focus for a proactive HRD approach to resiliency development are risk, asset, and process strategies.

Risk-focused HRD strategy. This development strategy aims to proactively and aggressively avoid circumstances and reduce the risks that may cause adverse events. In developmental psychology research, most resilient people were found to have strong social support networks (e.g., family and friends), from which they can draw upon during traumatic events (Masten, 2001). We suggest that the same holds true for developing human resources resiliency. Although it is not always possible to foresee external and/or environmental indicators that may lead to adversity in an organization, it is likely that a strong organizational culture can and often does deter internal lapses (e.g., ethical crises, sexual harassment, and employee misconduct) that may leave those involved facing adverse events.

The appropriate culture that is proactively resistant to the need for resiliency is in part created by developing trust and reciprocity between the organization and its leadership and the individual employee's. To develop such a culture, HRD needs to foster a positive employee-employer psychological contract. This contract involves the implicit exchange between employee and employer of factors such as social support, promotion prospects, and job satisfaction in return for organizational commitment and positive organizational socialization (Hind et al., 1996). In this era of downsizing, employees feel that they should not show loyalty to their organization because they unfortunately, but justifiably, feel that their organization has not and will not be loyal in return.

In addition to downsizing, the ethical meltdowns in companies such as Enron and Worldcom have resulted in tens of thousands of unemployed workers, loss of retirement funds, and years of criminal and civil litigation. As such, the average American's faith in their employer and its leaders has been shaken. For example, a recent Gallup poll found only about a third of U.S. working adults indicated that their organizational leaders exhibited authentic, genuine behaviors (Avolio & Luthans, 2006). To counter this lack of faith, the employer must continually foster an environment of social support, where promotion prospects and performance feedback are offered as a mutual benefit, and where employees can regain organizational commitment and job satisfaction (Hind et al., 1996). If the HRD process can rebuild the trust that is inherent to a healthy, positive psychological contract with employees, they can avoid many of the issues that we have seen during the past decade and, in turn, strengthen the resilient capacity of employees when adverse events do occur. The specific HRD guideline for an effective strategy for proactively developing resiliency is to manage risks by creating an ethical and trustworthy culture.

Asset-focused HRD strategy. Although a risk-focused HRD strategy can help steer organizations away from adverse events, it is also important to add to the existing resources employees have in case of unavoidable crises. As we indicated in the theoretical framework for PsyCap resiliency, these assets include human capital such as knowledge, skills, and abilities and social networks of support or social capital (Luthans et al., 2004; Luthans & Youssef, 2004; Youssef & Luthans, 2005). Others suggest that although the days of job security may be over, the organization can and should still invest in their employees

by offering them tools to help in any new position or career (Hind et al., 1996). Specifically, an asset-focused HRD strategy for resiliency would enhance the "employability" of their people through paying for continued educational expenses, promoting developmental workshops and cross-training, and rewarding those seeking to better themselves. Such a strategy would foster employee engagement and reap the added benefit of an increased sense of ownership. Research has specifically found that a lack of education is a significant predictor of the inability to cope with stress; therefore, it follows that if organizations can increase members' education levels, the organization would be on a path toward increasing resilience (Bonanno, 2004). The specific HRD guideline for an effective strategy for proactively developing resiliency is to *invest in the human and social capital of employees*.

Process-focused HRD strategy. In addition to managing risks and increasing the amounts of personal and organizational resources to enhance assets, process-focused strategies can be employed in an attempt to influence the manner in which one interprets events and experiences (Masten & Reed, 2002). Although distinct, PsyCap hope, confidence, and optimism can be interdependently developed to contribute to the process of increasing the resilience an individual may have. We have already discussed the impact of willpower and way-power of hope, as well as the positive attributions that optimists make. However, as we indicated, perhaps the biggest contribution to the resiliency process may be efficacy (Avolio & Luthans, 2006). For example, efficacy has shown the strongest relationship to work-related performance (Stajkovic & Luthans, 1998) and openness to development (Bandura, 2000).

As a process-focused HRD strategy, it has been suggested that self-efficacy may have a mediating effect on resilience (Masten & Reed, 2002). For example, in clinical research, a high correlation has been found between the assets (i.e., the competencies) of clients and their resilience (Masten & Reed, 2002). Extending this finding to HRD, we posit that employees who have confidence in performing their job well (i.e., have high efficacy) will also likely have higher resilience. Widely recognized methods of self-efficacy development include mastery and success experiences, vicarious learning and/or modeling, persuasion and/or positive feedback, and psychological and/or physiological arousal and well-being (Bandura, 1997,2000). We suggest that these proven tactics of efficacy development be incorporated into

on-the-job training and mentoring relationships, which are commonly used components of HRD processes, to increase self-efficacy and thus result in enhanced, proactive resiliency when needed.

These risk-, asset-, and process-focused HRD strategies are all specific application steps that can be taken in anticipation of negative events. An example of an asset-focused strategy would be the contingency planning that Morgan Stanley undertook after the first terrorist attack on the World Trade Center in 1993 (Coutu, 2002). After that now somewhat-forgotten event, the company held numerous fire drills, created multiple back-up locations in case of another terrorist attack, and educated employees about what to do and how to evacuate in an emergency. Out of the thousands of employees that worked in the second tower on September 11,2001, Morgan Stanley lost only seven people. Although such organizational contingency planning can prepare employees for difficult times, it is still important to develop individual-level resilience that will be used in reaction to adverse challenges. We now turn to some specific reactive strategies, where one's existing resilience will actually be tested and exhibited for bounceback and beyond capabilities.

A Reactive Approach to Developing Resilience

Even in the absence of a proactive strategy for attenuating adversity or trauma, people can still find ways to be resilient as a reaction to an adverse (or positive) event. For example, repressive coping and self-enhancement are commonly observed in resilient people, although both are sometimes considered maladaptive and in selected situations should be avoided (Bonanno, 2004, 2005). To date, however, little attention has been given to how people develop resiliency in themselves or others. As stated earlier, Fredrickson, Tugade, and Waugh (2003) suggest that repeated exposure to positive emotions pre- and post-trauma may help strengthen an individual's resilience capacity.

Bonnano (2004) takes a somewhat different and multiplicative approach; he suggests that four distinct personality dimensions-positive emotion, self-enhancement, attribution or locus of control, and hardiness-may ultimately result in building pathways for individual resiliency. His approach echoes research by others (e.g., Luthar, Doernberger, & Zigler, 1993; Rutter, 1987), which holds that no single psychological dimension can maintain equilibrium in the aftermath

of traumatic events. Although Bonnano's (2004) approach comes from the clinical arena, there may be implications for HRD strategies in building resiliency in leaders, followers, and organizations through positive emotions, self-enhancement, attribution, and hardiness strategies.

Strategies using positive emotions. As we have indicated, positive emotion may be a key ingredient toward building resiliency (Fredrickson et al., 2003). Specifically, positive emotions may take the form of laughter or smiles and such emotions may reinforce or strengthen resiliency (Bonanno, Noll, Putnam, O'Neill, & Tickett, 2003). Though these types of positive emotions seem simplistic, their effects may be great. For example, one study found that bereaved individuals exhibiting genuine laughter and smiles when referring to their loss had better adjustment during several years of bereavement (Bonanno & Keltner, 1997). Also, not only do positive emotions usually assist in quieting or undoing negative emotion (Fredrickson & Levenson, 1998) but such positive emotions are increased by "continued contact with and support from important people in the ... person's social environment" (Bonanno & Keltner, 1997, p. 134).

A particularly relevant positive emotional strategy for HRD in building resiliency in today's employees can be found in the broaden-and-build model (Fredrickson, 2001). We propose that this strategy is reactive in nature because the development of coping tactics, such as thought-action repertoires, is developed along with the experience of stress or trauma (Fredrickson, 2001). These broad-minded thought-action repertoires, which are discussed next, seem to lead to anatomical changes in the brain, which may then include modifications to existing synapses that manage new activity (Fredrickson, 2001; Nelson, 1999).

Fredrickson's (1998) broaden-and-build model suggests people have the capacity for broadening their momentary thought-action repertoires and building out their personal resources. Specifically, positive emotions have been shown to trigger a wide range of thoughts and actions, whereas negative emotions narrow the mind to promote a quick response (Fredrickson, 1998). Negative emotional responses are perhaps a survival technique that may be linked to early human evolution, but people have changed the way they respond to adversity as the environment has advanced over time (Fredrickson, 2001). Positive emotions seem to be durable and add to a storehouse of personal resources, which then can be called upon when resilience is needed

(Aspinwall & Taylor, 1997; Fredrickson, 2001; Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000).

The previously discussed proactive risk-, asset-, and process-focused HRD strategies could also be used to build positive emotional experiences for organizational members. This can lead to increasing thought-action repertoires and the probability that members will enhance their resilience. Furthermore, an organization that sets forth a vision that allows their employees to gain meaning and satisfaction from their work may be another vehicle in which positive feelings can be created around ordinary events (Coutu, 2002; Fredrickson, 2001). Getting employees to exhibit positive emotions and their ability to trigger an "upward-spiral" that can increase their resilience would seem to be an effective reactive HRD strategy.

Strategies using self-enhancement. Besides positive emotions, another reactive HRD strategy for building resilience might utilize selfenhancement. This is an individual trait-like tendency toward overly positive or unrealistic self-serving biases but, according to Taylor and Brown (1988), self-enhancers are also adaptive and generally better able to cope with stressful events. In short, self-enhancers tend to be extremely confident people in almost any situation. They believe that they will almost always find a way to succeed. For example, clinical researchers Bonnano and colleagues (2002) found that self-enhancers were rated as being better adjusted to their surroundings during stressful events. Furthermore, they found that self-enhancers undergoing bereavement of a loved one were generally more adaptive to their loss. Moreover, a recent longitudinal study with a sample of people who were in or near the World Trade Center towers at the time of the September 11th terrorist attacks found that self-enhancement is positively related to resilience and that posttraumatic stress disorder (PTSD) and depressive symptomatic trajectories of resilient participants generally remained low and stable as far as 18 months post-September 11th (Bonanno, Rennicke, & Dekel, 2005).

The critics of self-enhancement argue that the trait masks significant social liabilities, is quite often illusory, and promotes narcissism (Colvin et al., 1995; John & Robins, 1994; Paulhus, 1998; Shedler, Mayman, & Manis, 1994). Nevertheless, self-enhancement has been shown to build resilience and if harnessed, although its drawbacks are diminished, may be a useful HRD strategy.

Strategies using attribution. Still another reactive HRD strategy would be to use optimistic attributions to allow individuals to move past a negative event. Attribution can be defined as the perception or inference of cause (Kelley & Michela, 1980). A main component of attribution theory related to building resilience would be locus of control, or the belief that the individual has control over the environment (internal) versus the belief that the environment has control over the individual (external) (Weiner et al., 1972). As internal attributions heighten the disappointment felt in failure, it may follow that an external locus 38 Human Resource Development Review / March 2006 of control may be a pathway toward building resilience (Bonanno, 2004, 2005). In this process of attribution, optimists' abilities to emotionally dissociate from stressful situations may allow them to adapt (Bonanno, 2004). Seligman (1998) has demonstrated that attributional styles can be learned and would serve as an important precedent in adapting an attributional HRD strategy for developing resiliency.

Strategies using hardiness. According to Maddi and Koshaba (1984), hardiness involves the interrelated self-perceptions of commitment, control, and challenge that help in managing stressful circumstances in a manner that turns them into developmental rather than debilitating experiences. Put another way, Bonnano (2004, p. 25) points out that "hardiness consists of three dimensions: being committed to finding meaningful purpose in life, the belief that one can influence one's surroundings and the outcome of events, and the belief that one can learn and grow from both positive and negative life experiences." In addition, they argue that hardiness is best considered a personality variable that develops early in life and is reasonably stable over time, although they also suggest that it is amenable to change under certain conditions (Maddi & Kobasa, 1984). This suggests that hardiness can take on state-like characteristics, can be developed, and can thus be used as a reactive HRD strategy for developing resilience.

As an HRD strategy, hardiness can be developed through a meaning-making process. For example, our recent work on authentic leadership development suggests that leaders can tap a follower's self-concept and, more specifically, help the follower become more self-aware and introspective (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Avolio & Luthans, 2006; Luthans & Avolio, 2003). Such self-awareness and self-reflection may help followers find meaning in their work and

illuminate how they can master and become more hardy in their work environment. Likewise, via interacting with and modeling the authentic leader, followers by hearing and seeing their leader take responsibility for failures, as well as learning how the leader grows from such experiences, will become more hardy themselves.

Implications for Future Research

The major purpose of this article has been to provide the theoretical foundation and specific guidelines for HRD of the psychological capital factor of resiliency. Although there is beginning empirical evidence of the relationship between PsyCap resiliency and employee performance (e.g. Luthans et al., 2005), research is needed to examine the relationship with other outcomes such as job satisfaction, organizational commitment, organizational citizenship behaviors, retention, and employee wellness. For example, we would expect resilient employees to be more satisfied and committed because they were allowed by the nature of their job and organizational leaders to bounce back from adversity, problems, or even failures. There is also supporting evidence of the positive relationship between resiliency and life satisfaction (Seligman, 2002). Thus, an interesting question for future research would be, Is there a positive relationship between resiliency and satisfaction and/or commitment? Does organizational leadership (and/or organizational cultural context) moderate (or mediate) this relationship? Especially in light of rapidly escalating health-care costs, perhaps even more important for future research would be to test the question, Does employee resiliency relate to physical and mental well-being? Does this translate (through utility analysis) to decreased health-care costs for today's organizations?

Besides examining the impact of resiliency on various desired organizational outcomes, there is also future research needed on the relationship that resiliency has with the other PsyCap factors. As discussed, the conceptual differences between resiliency and hope, optimism, and confidence and/or efficacy are fairly well established, but the empirically derived relationships between these PsyCap factors are yet to be determined. For example, although self-efficacy and resiliency seem to have agreed upon conceptual independence (e.g., proactive versus reactive), there is a need for empirical investigations of the relationships between resiliency and the other PsyCap factors

that are proposed in this article. Specifically, does self-efficacy (or hope, or optimism) mediate (or moderate) the relationships between resiliency and desired outcomes? Another research question would be whether there is a minimum threshold level of efficacy (or hope, or optimism) that is necessary for resiliency to be activated and effective. Are the relationships between resiliency and the other PsyCap factors unidirectional, bidirectional, or determined by multiple and interactive ways? In terms of levels of analysis, will these relationships between resiliency and the other PsyCap variables change when going from the individual to the group and/ or team to the organization?

In the final analysis, the true relevancy of resiliency to HRD will have to come from research demonstrating that resiliency can indeed be developed. This will require field experimental studies that can be conducted with HRD training workshops or longer term programs developed around the guidelines suggested in this article (i.e., the reactive and proactive strategies). To eliminate as many confounds as possible, the levels of resiliency can be determined before and after a carefully constructed resiliency intervention and also be compared to a randomly assigned control group that goes through some other non-related intervention (e.g., a group dynamics exercise or team-building program) with resiliency also measured before and after. This type of study can provide evidence whether resiliency can be 40 Human Resource Development Review *I* March 2006 developed and make a contribution to the effective arsenal of HRD techniques and impact.

Conclusion

Traditionally, HRD has mainly focused on human capital-knowledge, skills, and abilities. This important responsibility of HRD is as great as ever, but in these times, we would suggest, may no longer be sufficient. In this era of exponential technological change, "flat-world" globalization and competition, ethical meltdowns, and especially downsizing or "rightsizing," HRD must now go beyond human capital and, we propose, turn attention to the recently recognized psychological capital of human resources. This PsyCap is theory and research based, and, especially relevant to HRD, open to change and development. It is concerned with who people are and developing what they can become. Although confidence and/or efficacy, hope, and optimism meet the PsyCap criteria, most overlooked to date, and especially relevant

to the times and adaptable to HRD, is resiliency. This article has hopefully provided the theoretical grounding and meaning, specific guidelines for HRD practice, and future needed research agendas for developing the psychological capital of resiliency.

References

- Adler, P. S., & Kwon, S. W (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27, 17-40.
- Aspinwall, L. G., & Taylor, S. E. (1997). A stitch in time: Self-regulation and proactive coping. *Psychological Review*, 121, 417-436.
- Avolio, B. J., Gardner, W L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15, 801-823.
- Avolio, B. J., & Luthans, F. (2006). *The high impact leader*. New York: McGraw-Hill. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E. A. Locke (Ed.). *Handbook of principles of organizational behavior* (pp. 120-136). Oxford, UK: Blackwell.
- Block, J. (1961). Ego-identity, role variability, and adjustment. *Journal of Consulting and Clinical Psychology*, 25, 392-397.
- Bonanno, G. A. (2004). Loss, trauma and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59 (1), 20-28.
- Bonanno, G. A. (2005). Clarifying and extending the construct of adult resilience. *American Psychologist*, 60 (3), 265-267.
- Bonanno, G. A., & Keltner, D. (1997). Facial expressions of emotion and the course of conjugal bereavement. *Journal of Abnormal Psychology*, 106 (I), 126-137.
- Bonanno, G. A., Noll, J. G., Putnam, F. W, O'Neill, M., & Tickett, P. (2003). Predicting the willingness to disclose childhood sexual abuse from measures of repressive coping and dissociative experiences. *Child Maltreatment*, 8, 1-17.
- Bonanno, G. A., Papa, A., & O'Neill, K. (2001). Loss and human resilience. *Applied and Preventive Psychology*, 10, 193-206.
- Bonanno, G. A., Rennicke, C., & Dekel, S. (2005). Self-enhancement among high exposure survivors of the September 11th terrorist attack: Resilience or social maladjustment? *Journal of Personality and Social Psychology*, 88, 984-998.
- Colvin, C. R., Block, J., & Funder, D. C. (1995). Overly positive self-evaluations and personality: Negative implications for mental health. *Journal of Personality and Social Psychology*, 68, 1152-1162.
- Coutu, D. L. (2002, May). How resilience works. *Harvard Business Review*, 46-55. Elias, M. (2005, June 29). There's a recipe for resilience. *USA Today*, ID-2D.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psy-*
- chology, 2 (3), 300-319.

 Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The
- broaden-and-build theory of positive emotions. *American Psychologist*, 56 (3), 218-226.

- Fredrickson, B. L., & Levenson, R. W. (1998). Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition and Emotion*, 12, 191-220.
- Fredrickson, B. L., Tugade, M. M., & Waugh, C. E. (2003). What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology*, 84 (2), 365-376.
- Garmezy, N. (1971). Vulnerability research and the issue of primary prevention. *American Journal of Orthopsychiatry*, 41, 101-116.
- Garmezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E. J. Anthony & C. Koupernik (Eds.), *The child in his family: Vol.* 3, *children at psychiatric risk* (pp. 77-97). New York: Wiley.
- Gest, S. D., Reed, G. M., & Masten, A. S. (1999). Measuring developmental changes in exposure to adversity: A life chart and rating scale approach. *Development and Psychopathology*, 11, 171- 192.
- Gist, M. E., Stevens, C. K., & Bavetta, A. G. (1991). Effects of self-efficacy and post-training intervention on the acquisition and maintenance of complex interpersonal skills. *Personnel Psychology*, 44, 837-861.
- Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, 35, 603-618.
- Hamel, G., & Valikangas, L. (2003, September). The quest for resilience. *Harvard Business Review*, 51-63.
- Hind, P., Frost, M., & Rowley, S. (1996). The resilience audit and the psychological contract. *Journal of Managerial Psychology*, 11 (7), 18-29.
- John, O. P., & Robins, R. W. (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. *Journal of Personality and Social Psychology*, 66 (1), 206-219.
- Kanter, R. M. (2004). *Confidence*. New York: Crown Business. Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual Review of Psychology*, 31, 457-501.
- Kraemer, H. C., Kazdin, A. E., Offord, D. R., Kesler, R. C., Jensen, P. S., & Kupfer, D. J. (1997). Coming to terms with the terms of risk. *Archives of General Psychiatry*, 54, 337-343.
- Luthans, F. (2002a). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23, 695-706.
- Luthans, F. (2002b). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16, 57-72.
- Luthans, F. (2003). Positive organizational behavior (POB): Implications for leadership and HR development and motivation. In R. M. Steers, L. W. Porter, & G. A. Begley (Eds.), *Motivation and leadership at work*. New York: McGraw-Hill/Irwin.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership: A positive developmental approach. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 241-261). San Francisco: Barrett-Koehler.
- Luthans, F., Avolio, B. J., Walumbwa, F. O., & Li, W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review*, 1,247-269.
- Luthans, F., & Jensen, S. M. (2002). Hope: A new positive strength for human resource development. *Human Resource Development Review, I,* 304-322.

- Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizons*, 47 (1),45-50.
- Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33 (2), 1-22.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (in press). *Psychological capital*. Oxford, UK: Oxford University Press.
- Luthar, S. S. (1991). Vulnerability and resilience: A study of high-risk adolescents. *Child Development*, 62, 600-616.
- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12 (4), 857-885.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, *71*, *543-562*.
- Luthar, S. S., Doernberger, C. H., & Zigler, E. (1993). Resilience is not a unidimensional construct: Insights from a prospective study of inner-city adolescents. *Development and Psychopathology*, 5,703-717.
- Maddi, S. R., & Koshaba, D. M. (1984). Resilience at work: How to succeed no matter what life throws at you. New York: AMACOM.
- Maddux, J. E. (2002). Self-efficacy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 277-287). Oxford, UK: Oxford University Press.
- Mager, R. E (1992, April). No self-efficacy, no performance. Training, 32-34.
- Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 3-25). Hillsdale, NJ: Lawrence Erlbaum.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56, 227-239.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425-444.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from successful children. *American Psychologist*, 53, 205-220.
- Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Adaptation in the context of adversity: Pathways to resilience and maladaptation from childhood to late adolescence. *Development and Psychopathology, II*, 143-169.
- Masten, A. S., & Reed, M.-GJ. (2002). Resilience in development. In C. R. Snyder & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 74-88). Oxford.
- Nelson, C. A. (1999). Neural plasticity and human development. *Current Directions* in *Psychological Science*, 8 (2), 42-45.
- O'Dougherty-Wright, M., Masten, A. S., Northwood, A., & Hubbard, J. J. (1997). Long-term effects of massive trauma: Developmental and psychobiological perspectives. In D. Cicchetti & S. L. Toth (Eds.), *Rochester symposium on developmental psychopathology: Vol.* 8. *Developmental perspectives on trauma* (pp. 181-225). Rochester, NY: University of Rochester Press.

- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 74, 1197-1208.
- Peterson, C. (2000). The future of optimism. American Psychologist, 55, 68-78.
- Prilleltensky, I., Nelson, G., & Peirson, L. (2001). The role of power and control in children's lives: An ecological analysis of pathways toward well ness, resilience, and problems. *Journal of Community & Applied Social Psychology*, 11, 143-158.
- Reivich, K., & Shatte, A. (2002). The resilience factor. New York: Broadway Books.
- Richardson, G. E. (2002). The meta-theory of resilience and resiliency. *Journal of Clinical Psychology*, 58, 307-321.
- Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Primary prevention of psychopathology: Vol.* 3. *Social competence in children* (pp. 49-74).
- Hanover, NH: University Press of New England. Rutter, M. (1987). Psychological resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57 (3), 316-33l.
- Scheier, M. E, & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.
- Seligman, M. E. P. (1998). Learned optimism. New York: Pocket Books.
- Seligman, M. E. P. (2002). Authentic happiness. New York: Free Press. Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. American Psychologist, 55 (I), 5-14.
- Shedler, J., Mayman, M., & Manis, M. (1994). More illusions. *American Psychologist*, 49, 974-976. Snyder, C. R. (2000). *Handbook of hope*. San Diego, CA: Academic Press.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al. (1991). The will and the ways. *Journal of Personality and Social Psychology*, 60, 570-585.
- Snyder, C. R., & Lopez, S. J. (Eds.). (2002). *Handbook of positive psychology*. Oxford, UK: Oxford University Press.
- Stajkovic, A. D., & Luthans, E (1998). Self-efficacy and work-related performance: A metaanalysis. *Psychological Bulletin*, 124, 240-26l.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, *103*, *193-210*.
- Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., & Gruenewald, T. L. (2000). Psychological resources, positive illusions, and health. *American Psychologist*, 55, 99-109.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86, 320-333.
- Van Marrewijk, M., & Timmers, J. (2003). Human capital management: New possibilities in people management. *Journal of Business Ethics*, 44, 171-184.
- Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S., & Rosenbaum, R. M. (1972). Perceiving the causes of success and failure. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 95-120). Morristown, NJ: General Learning Press.
- Werner, E. E., & Smith, R. S. (1982). Vulnerable but invincible: A study of resilient

- children. New York: McGraw-Hill.
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood.* Ithaca, NY: Cornell University Press.
- Wright, P. M., & Snell, S. A. (1999). Social capital and strategic HRM: It's who you know. *Human Resource Planning*, 22, 62-65.
- Youssef, C. M., & Luthans, F. (2005). Resiliency development of organizations, leaders & employees: Multi-level theory building for sustained performance. In W. Gardner, B. J. Avolio & F. O. Walumbwa (Eds.), *Authentic leadership theory and practice. Origins, effects, and development.* Oxford, UK: Elsevier.

Fred Luthans is a university professor and George Holmes distinguished professor at the University of Nebraska-Lincoln, a fanner president of the academy of management, his current research revolves around the theory and performance impact of psychological capital.

Gretchen R. Vogelgesang is a doctoral student in the Gallup Leadership Institute at the University of Nebraska-Lincoln. She received her MBA from DePaul University. Her current research interests include authentic leadership development and the development of resiliency as a part of psychological capital.

Paul B. Lester is a doctoral candidate in the Gallup Leadership Institute at the University of Nebraska-Lincoln. An active-duty army officer, he graduated from the United States Military Academy in 1996. He received his MS from Murray State University. His current research interests include leadership development, strategic leadership, trust, efficacy, and resiliency.