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A Socially Embedded Model of Thriving at Work

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Thriving describes an individual's experience of vitality and learning. The primary goal of this paper is to develop a model that illuminates the social embeddedness of employees' thriving at work. First, we explain why thriving is a useful theoretical construct, define thriving, and compare it to related constructs, including resilience, flourishing, subjective well-being, flow, and self-actualization. Second, we describe how work contexts facilitate agentic work behaviors, which in turn produce resources in the doing of work and serve as the engine of thriving. Third, we describe how thriving serves as a gauge to facilitate self-adaptation at work. We conclude by highlighting key theoretical contributions of the model and suggesting directions for future research.

Key words: thriving; energy; learning; positive growth; resources

Employees vary in the degree to which they languish or thrive at work. Whereas languishing captures the subjective experience of being stuck, caught in rut, or failing to make progress (Keyes 2002), thriving captures the opposite. When people are thriving, they feel progress and momentum, marked both by a sense of learning (greater understanding and knowledge) and a sense of vitality (aliveness).

Thriving is an important domain of inquiry for several reasons. First, thriving offers new insights for theories of self-adaptation (Tsui and Ashford 1994). Self-adaptation is a process by which individuals guide goal-directed activities over time and across changing circumstances (Kanfer 1990). Models of self-adaptation typically treat individuals as rational and isolated entities who focus on goal setting, self-observation, self-reward, and selfpunishment as a way to regulate their own behavior (Porath and Bateman in press). This perspective overlooks the idea that individuals can also self-regulate based on how they feel. Thriving is a desirable subjective experience that allows individuals to gauge whether what they are doing and how they are doing it is helping them to develop in a positive direction. By developing in a positive direction, we simply mean an individual's sense of improvement in short-term individual functioning and long-term adaptability to the work environment (Hall and Fukami 1979, Kolb 1984). Rather than just serving as a corrective mechanism generated by gaps in performance, our view is that people use changes in their sense of thriving to gauge whether and how they should take action in the context of work to sustain or renew their thriving. Thus, thriving serves an adaptive function that helps individuals navigate and change their work contexts to promote their own development.

Second, thriving is important to understand because it is likely to contribute to positive health (Christianson et al. 2005). In the field of medicine, "failure to thrive" is a common term used to indicate poor health (Bergland and Kirkevold 2001); conversely, we suggest that a sense of thriving is associated with positive health. When individuals feel a sense of vitality and aliveness. they are less likely to be anxious and depressed, and thus more likely to be mentally healthy (Keyes 2002). Furthermore, a sense of learning can contribute to positive physical health. Alfredsson et al. (1985, p. 378) concluded that "workers...with few possibilities to learn new things" had a heightened probability of being hospitalized for heart attacks. Similarly, Ettner and Grzywacz (2001) found that employees who reported more learning at work also were more likely to report that work contributed positively to their mental and physical health.

This link between thriving and health may also have important practical implications. Work and the contexts in which it is accomplished often have toxic effects on human vitality and health (e.g., Danna and Griffin 1999, Frost 2003, Maslach and Leiter 1997, Potter et al. 2002, Spector et al. 1988, van der Ploeg et al. 2003, Vigoda 2002, Wright and Bonett 1997, Wright and Cropanzano 1998). We know a great deal about overcoming disease and infirmity, but we know much less about how work contexts can enable positive health, wellness, and positive functioning (Cameron et al. 2003, Ryff and Singer 1998). Thus, a better understanding of how individuals thrive at work may provide some answers for how organizations can reduce health care costs and absenteeism.

Our purpose is to build a socially embedded model of thriving at work. First, we define thriving and distinguish it from related constructs. Second, we describe how agentic behaviors constitute the engine of the thriving process. Third, we discuss how agentic behaviors are fueled both by the formal, enduring features of a work unit and by resources created in the doing of work. Fourth, we describe how thriving plays a role in helping individuals achieve a form of healthy self-adaptation that enables them to develop additional resources to fuel the behaviors that promote thriving and enable their positive development. We conclude by discussing theoretical implications and proposing an agenda for future research. At various points in the paper, we bring elements of our model alive with illustrative quotes and examples from related field research on thriving at work (Sonenshein et al. 2005).

Defining Thriving at Work

We focus on thriving at work because people are devoting increasing amounts of their time to this domain of life (Schor 1993), and because they are finding work increasingly attractive relative to home life (Hochschild 1997). We define thriving at work as the psychological state in which individuals experience both a sense of vitality and a sense of learning at work. Thriving as a psychological state is a temporary internal property of an individual, rather than a more enduring disposition (see Chaplin et al. 1988). Vitality refers to the positive feeling of having energy available (Nix et al. 1999), reflecting feelings of aliveness. Learning refers to the sense that one is acquiring, and can apply, knowledge and skills (Dweck 1986, Elliott and Dweck 1988). Thriving registers the joint sense of vitality and learning, which communicates a sense of progress or forward movement in one's self-development.

We see both vitality and learning as essential components of thriving for three reasons. First, the subjective experience of development encompasses both the affective (vitality) and cognitive (learning) dimensions of psychological experience. Second, a focus on thriving as both vitality and learning grounds the construct in both hedonic and eudaimonic perspectives on psychological functioning and development (Ryan and Deci 2001, Waterman 1993). In simple terms, the hedonic perspective emphasizes that individuals seek out pleasurable experiences—it is reflected in the vitality component of thriving. In contrast, the eudaimonic perspective emphasizes that individuals seek to realize their full potential as human beings—it is reflected in the learning component of thriving. The third reason for defining thriving as the intersection of vitality and learning is that preliminary evidence from narratives of thriving at work shows that individuals describe both vitality and learning as essential components of forward progress in development. The following two quotes, drawn from related qualitative research on thriving narratives, capture both vitality and learning (Sonenshein et al. 2005):

I know thriving as I feel it. It is like going forward. It is not staying in place. It is not stagnant. You are moving forward; not necessarily in job titles or positions, but just being able to move forward in thinking and in the activities that you are engaged in and in your mindset, all of those things. (A social worker)

[Thriving is] being energized, feeling valued, and that what you do is valued.... Thriving is being productive...being open to the challenges presented and to learn and grow and having those opportunities to grow. (A mid-level manager in a large, metropolitan nonprofit)

Both of the above quotes capture thriving as the joint experience of learning and vitality. More specifically, if individuals see themselves as learning, but depleted, they are not thriving. This might be captured by the experience of an employee who sees that she is learning in significant ways as she masters a new technology, but feels burned out in the learning process. Conversely, if an employee experiences vitality at work but has no sense that he is adding to his existing knowledge or skills, he is not thriving. For example, consider the employee who feels alive at work due to relationships with energizing colleagues, but feels stagnated in his development because he is not learning.

Distinguishing Thriving from Related Constructs

As part of our conceptual development of the thriving construct, we distinguish it from related constructs of resilience, flourishing, flow, subjective well-being, and self-actualization.

First, resilience is similar to thriving in that it refers to an individual's capacity for adaptability and positive adjustment (Carver 1998, Sutcliffe and Vogus 2003). However, thriving and resilience have important differences. First, resilience focuses on rebounding in the face of particularly extreme and extenuating circumstances that pose a threat to salutary outcomes (Masten and Reed 2002, Sutcliffe and Vogus 2003). Thriving can occur with or without adversity. People can experience learning and vitality without necessarily encountering significant, sustained hardship or challenge, such as when one is challenged with a new opportunity such as a promotion or new project assignment (Roberts et al. 2005). Second, whereas resilience refers to behavioral capacities that allow one to bounce back from untoward events, thriving focuses on the positive psychological experience of increased learning and vitality to develop oneself and grow at work.

Second, thriving is distinct from flourishing. Flourishing is typically defined as positive mental health, or a state in which an individual functions well psychologically and socially (Keyes and Haidt 2002). Similar to thriving, flourishing involves a positive state of human functioning. However, flourishing is a much broader positive state than thriving. For example, flourishing requires that an individual score high on either

psychological or social well-being and 6 of 11 scales of positive functioning. Only one of these scales captures a sense of learning, so it is possible to flourish without experiencing learning.

Third, thriving is also conceptually distinct from subjective well-being. Subjective well-being captures the degree to which people judge their lives positively (Diener et al. 1999). It includes people's emotional responses and overall/domain satisfactions (e.g., life, work, family, health satisfaction). One key distinction is that well-being, like flourishing, reflects a more general gauge on an individual's overall positive condition. Thriving, in contrast, is more specific in that it gauges an individual's sense of vitality and learning. Moreover, whereas subjective well-being adopts a hedonic perspective on psychological functioning, thriving captures both the hedonic and eudaimonic perspectives.

Fourth, flow is an enjoyable psychological state that refers to the "holistic sensation people feel when they act with total involvement in the activity" to the point of losing awareness of time and their surroundings (Csikszentmihalyi 1975, p. 36). The fact that an individual senses positive energy is common to both flow and thriving. However, people can be in a flow state and not see themselves as learning. For example, people commonly experience flow while driving a car (Csikszentmihalyi 1990). Despite a sense of positive energy, driving may not be associated with a heightened sense of learning unless one is driving a new car, going to a new destination, or having a knowledge-producing conversation with a passenger.

Finally, self-actualization refers to reaching one's full potential (Maslow 1998). While thriving is also relevant to increasing one's potential, it is different from self-actualization in a fundamental way. Maslow indicates that self-actualization only occurs when all other needs have been fulfilled (physiological, safety, belongingness, esteem). As such, according to Maslow, only about 2% of people are self-actualized. In contrast, we view thriving at work as more common. Indeed, related research on thriving narratives has found that most people can identify some time in their life when they were thriving at work (Sonenshein et al. 2005). Moreover, people can thrive when core needs (e.g., physiological needs) are not met, such as during times of serious illness (Tedeschi and Calhoun 2004).

A Socially Embedded Model of Thriving at Work

We unfold our thriving-at-work model in four steps. We begin with our foundational assumptions, introduce agentic behaviors as the engine of thriving, explain how the context (unit features and resources) enables agentic behaviors, and conclude with a discussion of how thriving contributes to a model of self-adaptation.

Starting Assumptions

First, we assume that the contextual enablers of thriving are not merely the opposite of factors that exacerbate stress. Thriving is not cultivated simply by decreasing stressors. Instead, it requires increases in the presence of specific psychological states, behaviors, resources, and unit contextual features. For example, stress research demonstrates that job insecurity, unsafe working conditions, and work overload are key causes of individual stress and strain in organizations (Kinicki et al. 1996). Simply reducing these conditions does not mean that an individual will thrive. We argue that if the right enabling conditions and resources are present, there is an increased likelihood that individuals will thrive, even under these onerous conditions.

Second, we acknowledge that individual traits may predispose some individuals to thrive more than others. For example, individuals who are promotion focused (i.e., those who are motivated by growth and development needs) may be more attracted to conditions of thriving than individuals who are prevention focused (i.e., those who are motivated by security needs) (Brockner and Higgins 2001). However, we believe we can contribute more to theory development and learn more to help individuals and organizations by placing our focus on understanding the contexts that enable thriving. For example, Ryan and Deci (2000) suggest that all people have the capacity to pursue growth and development, but that whether they succeed in this pursuit depends on the features of the contexts in which they act.

Why a Socially Embedded Model?

We propose that thriving at work is socially embedded for several reasons. The first reason is that vitality and learning are deeply rooted in social systems. For example, Miller and Stiver (1997) suggest that the development of the self occurs through dynamic interaction with others. Their relational view of self-development describes how vitality-what they term zest-comes from relational connections with others. Second, with respect to learning, many scholars claim that learning does not happen solely in the individual mind or in isolation from others. Instead, learning occurs in social interactions—through interactions with others in the doing of work, talking about work, and observing others doing their work (Brown and Duguid 1991, Gherardi et al. 1998, Wenger 1998). Learning takes place through the social interactions that bind us together with others, both inside and outside the organizations in which we work.

Model Overview

The central premise of our model is that when individuals are situated in particular work contexts, they are more likely to thrive (see Figure 1). We focus on two aspects

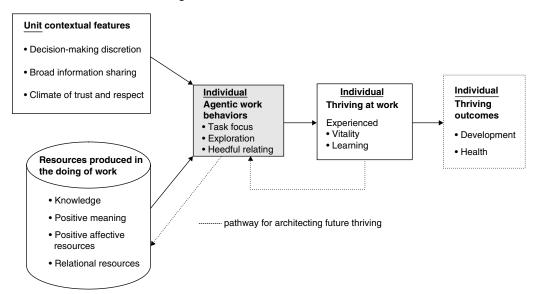


Figure 1 The Social Embeddedness of Thriving at Work

of the work context—the social structural features of the focal work unit context and resources produced in the doing of work. First, when individuals are embedded in unit contexts that encourage decision-making discretion, broad information sharing, and a climate of trust and respect, they are more likely to respond with agentic behaviors that promote their experience of thriving. Second, when individuals behave agentically, they produce a set of resources in the doing of work that feed back to fuel these agentic work behaviors, further promoting their thriving. Thus, we focus not only on how unit contextual features and resources produced in the doing of work promote thriving by shaping agentic work behaviors, but also on how individuals actively cultivate resources in the doing of work to fuel more thriving. In this way, agentic work behaviors comprise the engine that promotes thriving at work. The experience of thriving at work also promotes more agentic behaviors as individuals seek to sustain their own thriving into the future.

The general idea is that the work unit contexts and resources produced in the doing of work affect the individual through situational mechanisms (Hedström and Swedberg 1998). We use the term mechanism simply to mean an explanatory process; mechanisms explain how and/or why one thing leads to another. Mechanisms are not like the more deterministic laws of physics, in which certain inputs lead to certain outputs with no ifs, ands, or buts (Elster 1998, Hedström and Swedberg 1998). Instead, mechanisms highlight the probabilistic nature of social life. Situational mechanisms account for individual exposure to specific situations with specific effects; in particular, situational mechanisms link social structures, events, or macro states to the beliefs, desires, and opportunities of individual actors in a relatively systematic way (Hedström and Swedberg 1998, p. 23).

We discuss these mechanisms in more detail in subsequent sections, but start by explaining how agentic work behaviors serve as the engine of thriving—that is, how, when people act agentically, they are more likely to experience vitality and learning at work.

Agentic Work Behaviors: The Engine of Thriving

When people are active and purposeful at work, they are said to act agentically (Bandura 2001). In this article, we highlight three agentic behaviors that contribute to thriving at work: task focus, exploration, and heedful relating. Task focus describes the degree to which individuals focus their behavior on meeting their assigned responsibilities at work (Mitchell and Daniels 2003). It means attention to getting one's work done in a satisfactory manner. Exploration involves experimentation, risk taking, discovery, and innovation behaviors that help people to stretch and grow in new directions (Button et al. 1996). It might mean reaching out in new directions, or to new communities, at work. Finally, when individuals operate attentively to those around them, we say that they are heedfully relating (Weick and Roberts 1993). When heedfully relating, employees look out for one another by subordinating their idiosyncratic intentions to the effective functioning of the system (Weick and Roberts 1993). In the subsections below, we show how each of these agentic behaviors can help people to experience thriving at work.

Task Focus. Individuals are more likely to thrive when they focus on their tasks at hand. A task focus promotes the experience of *vitality* in two ways. When individuals focus on their tasks, they are more likely to become absorbed in their work, and thus feel energetic (Brown and Ryan 2003, Csikszentmihalyi 1990, Ryan and Deci 2000). Also, when individuals complete

their work successfully, they are likely to feel a sense of accomplishment, which increases energy. Not meeting task requirements can lead to a sense of failure and feelings of helplessness, both of which can deplete one's energy. A task focus also contributes to a sense of *learning*. When individuals focus on their tasks, they are more likely to develop and refine routines and repertoires for doing their work efficiently and effectively, which contributes to learning. In addition, a failure to meet task requirements can result in real restrictions to individual autonomy, feelings of incompetence, and fewer opportunities for self-direction, all of which can lead to a sense that one is not learning.

Exploration. Individuals are more likely to thrive when they engage in exploratory behaviors.² First, exploration increases vitality. As individuals explore new ways of working, they are likely to pique their curiosity and feel energetic. Exploration makes it possible for employees to encounter novel ideas, information, and strategies for doing work; this exposure to novelty can provide and restore energy (e.g., Kaplan and Kaplan 1995). Second, exploration increases *learning* (Button et al. 1996). As individuals explore, the new ideas and strategies that they encounter increase the knowledge and skills that they possess and can apply. Accordingly, individuals will sense that they are learning, especially as they recover from mistakes that they encounter in their exploration (Lee et al. 2004). Consider what one individual noted in a thriving narrative:

So I was a little bit nervous when I first started out, and I was like, "Ok I hope I don't make any mistakes here." So I got as much input as I possibly could and as much information as I possibly could.... So it was an ongoing situation [of] learning that you have to learn daily because things are constantly changing (Sonenshein et al. 2005).

Heedful Relating. Finally, thriving is more likely to occur when individuals heedfully relate with others. When individuals relate heedfully, they act in ways that demonstrate that they understand how their own jobs fit with the jobs of others to accomplish the goals of the system. This heedful relating can promote *vitality*. When individuals relate heedfully, they are more able and likely to help others and provide social support. Helping others and providing social support often increase affective (Carlson et al. 1988) and physiological (Brown et al. 2003) energy. Moreover, heedful relating promotes a sense of *learning* as well. As individuals attend to what their coworkers are doing, they are likely to learn from the strategies and approaches used by these coworkers (Bandura 1977). They also are more likely to feel responsible for the outcomes of the larger system (Parker and Sprigg 1999), and will be challenged to perform a range of integrative behaviors that extend beyond the boundaries of their focused work responsibilities (Parker et al. 1997, Parker and Sprigg 1999). Consequently, heedful relating can enable individuals to acquire and use new skills, and thus experience learning. In the next section of the paper, we move beyond the engine of thriving to examine the social embeddedness of thriving.

Unit Contextual Features: Social Structural Enablers of Thriving

The propensity for these agentic behaviors to promote thriving is heightened when work contexts feature discretion, information sharing, and a climate of trust and respect. When individuals are exposed to unit contexts with these features, they are more likely to experience work as self-determined, and are more likely to behave in agentic ways. In this way, self-determination is a key mechanism for explaining how the context can enable agentic behaviors. Decision-making discretion concerns the extent to which an individual is authorized to make decisions that affect his or her own work (Finkelstein and Hambrick 1990, Lawler 1992). Broad information sharing refers to the extent to which information (about unit vision, unit performance, product/service quality, etc.) is communicated widely throughout the unit (Lawler 1992, Spreitzer 1996). A climate of trust and respect refers to the degree to which the work unit encourages feelings of confidence in and appreciation for others (Spreitzer 1996).

Of course, individuals are often influenced by the larger organizational contexts in which they are situated. However, for two reasons, we focus on the proximal contexts in which individuals work (i.e., the work unit and resources produced in the doing of work). First, multiple types of work contexts coexist within a single organization (Bowen and Ostroff 2004), but the more local the context, the more potent its impact on an individual's behavior. In part this is because expectations, work practices, and operating procedures are often enacted differently across units in an organization (Vogus 2004). Second, it is more reasonable to expect that individuals influence and shape their local work environments than the larger organizational contexts in which they are embedded. We recognize that some contextual features—such as adequate supervision, safe working conditions, satisfactory space/tools, and an enabling job design (Hackman and Oldham 1980) are basic ingredients for effective functioning at work. However, these structural features are merely a starting point for understanding what enables people to thrive and develop at work. For self-development, we suggest that a different set of contextual features is important.

In each of the sections below, we provide the rationale for why each contextual feature in our model enables agentic working behaviors. In each case, selfdetermination is the key mechanism for how context affects behavior. Self-determination theory (SDT) is at the center of our rationale because it describes how individuals pursue conditions that foster their own growth and development (Deci and Ryan 2000). Selfdetermination is a form of motivation that is internally directed rather than externally coerced or controlled. People do not thrive at work simply because they are exhorted to do so by a boss or forced to do so by the organizational system. Rather, when people act with volition, they are more likely to be oriented toward growth and to experience vitality (Ryan and Deci 2000). Self-determination is manifest in feelings of autonomy, competence, and relatedness (Ryan and Deci 2000). Autonomy refers to volition—the sense that one's behavior emanates from and is endorsed by oneself. Competence involves a sense of efficacy in dealing with the environment (Bandura 1977) and making effective use of surrounding resources (Ryff 1989). Finally, relatedness refers to feeling connected to others and having a sense of belongingness (Bowlby 1979). Ryan and Deci (2000) suggest that these three dimensions provide the essential psychological nutriments for agentic behavior and, ultimately, for psychological growth and development.

Decision-Making Discretion. When individuals are exposed to work contexts that foster decision-making discretion, their feelings of autonomy are strengthened and they are more likely to behave agentically. In a thriving narrative, one participant notes the importance of this discretion when she (an administrative assistant at a small magazine) describes her supervisor's managerial philosophy about making decisions and taking action: "Whatever you want to do, however you want do it...do it" (Sonenshein et al. 2005).

First, decision-making discretion fosters a task focus: Discretion creates an opportunity for individuals to feel more in control of their work, and to exercise choices about what to do and how to do it (Ryan and Deci 2000). Decision-making discretion provides individuals with freedom and choices about how to do their work rather than being externally controlled, regulated, or pressured. Individuals who perceive that they have little autonomy to act volitionally by choosing work strategies or influencing working conditions-or who have doubts about their capabilities—will prematurely slacken their task focus, particularly when faced with challenges (Wood and Bandura 1989). In contrast, when people feel autonomous and capable of mastering their work responsibilities, they are more likely to behave proactively and persistently in applying their skills to the job at hand (Bandura 1988).

Second, decision-making discretion promotes exploration. When individuals can exercise choice about what to do and how to do it, they are more likely to seek out new directions for doing their work (Amabile 1993). Being part of organizational decisions helps individuals build new skills and feelings of efficacy, which lead them to feel more comfortable taking risks and exploring

new opportunities (Spreitzer 1996). Third, contexts that support discretion strengthen relatedness beliefs (Ryan and Deci 2000) and thus promote heedful relating. Being part of organizational decisions contributes to a sense of connectedness with others, which encourages individuals to relate heedfully. Because they feel connected with others, they are likely to pay more attention to what others are doing.

Broad Information Sharing. Information sharing also fuels agentic work behaviors. Having access to a broad array of information increases the likelihood that individuals will have the requisite knowledge to make good decisions (Spreitzer 1996). As a result of this knowledge, individuals can feel confident to perform their work. In addition to promoting a task focus, the sharing of information also increases individuals' competence because it increases their abilities to quickly uncover problems as they arise, and to integrate and coordinate actions. Accordingly, this increased capacity to respond effectively in unfamiliar or challenging situations fuels exploration and experimentation with new behaviors (Bunderson and Sutcliffe 2002). Finally, when information is disseminated broadly, individuals can respond to suboptimal solutions and increase their understanding of how the system works (Weick and Sutcliffe 2001). Armed with broader information and the "big picture," individuals can focus on larger organizational contributions instead of focusing only on narrow tasks (Weick and Roberts 1993). Consequently, they can relate more heedfully with one another.

Climate of Trust and Respect. A climate of trust and respect will also promote agentic behaviors. When individuals are situated in climates of trust and respect, they are likely to feel autonomous, efficacious, and capable of mastering job demands (Spreitzer 1995). When individuals feel that they can trust each other, they are more willing to take risks in relationships (Edmondson 1999, Mayer et al. 1995). Moreover, a climate of trust and respect also facilitates exploration and experimentation with new behaviors (Bunderson and Sutcliffe 2002, Spreitzer 1995), in part because individuals feel safe to experiment. Finally, when individuals are exposed to a climate of trust and respect, they are more likely to believe that they are worthy and valued organizational members. This fosters heedful relating, as individuals are willing to cooperate and attend to what others are doing (Rhoades and Eisenberger 2002).

In summary, decision-making discretion, broad information sharing, and a climate of trust and respect increase the propensity that individuals will act agentically.

Agentic Enablers of Thriving: Producing Resources in the Doing of Work

As people act in agentic ways at work, they produce resources in the doing of their work. By resources, we mean assets that enable people to enact schemas (Feldman 2004). Sometimes these resources are assets that are produced within an individual (e.g., positive emotion or knowledge), while sometimes these assets are more collective goods (e.g., positive connections). In either case, the resources are endogenously produced through the interactions of an individual and others and emerge in the context from the practice of doing the work (Feldman 2004, Worline et al. 2004). Unlike physical and financial resources, which are depleted as they are used, these resources are renewable (Worline et al. 2004) in the sense that they are constituted and reconstituted in the doing of work. Unlike the relatively enduring features of an individual's work unit, these resources are more ephemeral; they are by-products of the ways in which individuals carry out their work.

The resources (see Figure 1) include knowledge, positive meaning, positive affective resources, and relational resources. Knowledge resources, which are created and constituted in the doing of work, refer to understanding the practices of work—that is, knowing how things get done (Orlikowski 2002). These knowledge resources might include knowing about who has relevant knowledge and where to obtain requisite information as needed (Moreland and Argote 2003). Positive meaning involves the purpose and significance inherent in work. It comes from the creation of worth or value in and/or with work, colleagues, or the organization (Pratt and Ashforth 2003). Positive affective resources are emotional feelings experienced in the doing of work; they include the feelings of joy, contentment, gratitude, peace, and hope (Fredrickson 2003, Roberts et al. 2005). Finally, relational resources refer to high-quality connections or bonds between individuals (Dutton 2003, Roberts et al. 2005). These relational resources might be generated in dyadic relationships with others at work—a mentor, a colleague, a friend, a person in another department, a supplier, or a customer. Alternatively, these relational resources might be generated from relationships with groups of individuals at work—a community of practice, a research lab, or a support group.

Task Focus. A task focus can contribute to several of the endogenous resources that are produced in the doing of work. First, a task focus can facilitate the creation of positive meaning. The intrinsic motivation that comes from the intense task engagement itself may lead to a sense of positive meaning (Csikszentmihalyi 1990). Second, when individuals are focused on their tasks, they are more likely to succeed in carrying them out and thus experience positive emotions (Brown and Ryan 2003). With a task focus, members are likely to accomplish successful exchanges, which increase positive affective resources between the exchange partners (Lawler and Yoon 1998). Third, research suggests that a lack of task focus will undermine relational resources

(Hackman and Morris 1975). It may be difficult for employees to establish positive connections if they are unsuccessful in accomplishing their work because they are letting their colleagues or teammates down. Conflict may ensue as supervisors and coworkers begin to resent individuals who fail to concentrate on their work; such conflict can be highly detrimental to interpersonal connections (De Dreu and Weingart 2003). In this way, a task focus can promote relational resources as well as prevent corrosive connections.

Exploration. There are several ways that exploration creates resources in the doing of work. First, exploration increases the knowledge in the system. Knowledge is a by-product of an individual striving to understand something new. When organizational members engage in exploration, they increase the amount of knowledge resources in interactions with others. Indeed, Lee et al. (2004) found that exploration at work fostered increased individual knowledge. Second, exploration activities can produce positive meaning. As individuals explore new activities at work, they are able to change the physical boundaries of their work and create additional ways of understanding the importance and meaning of what they are doing (Wrzesniewski and Dutton 2001). Third, exploration can lead to positive affective resources, as highlighted by the positive feeling that accompanies an "aha" experience when people learn something new (Kaplan and Kaplan 1995, Ryff 1989).

Heedful Relating. Resources are also produced as individuals relate heedfully with others as they go about their work. First, there is likely to be an increase in knowledge when individuals undertake actions that extend beyond their narrowly defined jobs and consider their interdependence with others (Parker and Sprigg 1999). Second, the more those individuals are attentive to and supportive of each other's behaviors, the more positive relational resources will result (Dutton and Heaphy 2003). If individuals act in isolation without understanding how they and their coworkers contribute to the functioning of the collective, high-quality connections may be strained or even severed as people find they cannot depend on each other when needed. Third, more heedful relating is likely to create more positive affective resources. For example, Rhoades and Eisenberger (2002) demonstrated that when employees perceive that their coworkers treat them fairly and care about their wellbeing, they experience more frequent positive moods. In addition, George and Bettenhausen (1990) have found that when individuals behave prosocially, acting as good citizens to the collective, they are also likely to experience positive moods. In sum, heedful relating can create knowledge, relational, and positive affective resources that promote additional agentic behaviors that are the engine of thriving at work.

Resources Produced in the Doing of Work Promote Agentic Behaviors

Our model of thriving at work suggests that a type of positive spiral (Fredrickson 2003) exists between agentic work behaviors and the resources created in the doing of work. The resources promoted by agentic work behaviors serve to further fuel the agentic work behaviors, and thus help to sustain thriving. How do the resources promote agentic work behaviors?

Knowledge Resources. Knowledge resources enable a task focus: When individuals have access to information, they are able to attend to their tasks without interruptions to search for the requisite information. Knowledge resources also promote exploration. As individuals interact with others, they glean more information and a more nuanced understanding about the practice of work. They can use these knowledge resources to recombine existing assets to improvise in the moment. Moreover, individuals can use knowledge resources to build a more integrated picture of their work situation so they can recognize more situations in which they can apply their skills (Weick et al. 1999). As individuals understand how to recombine their existing knowledge in new ways to solve problems, they can see how their work fits into the larger scheme of things, and thus will be likely to relate more heedfully with others.

Positive Meaning Resources. Positive meaning promotes all three agentic behaviors. First, when individuals see their tasks as meaningful, they are more likely to prioritize them and thus focus closely on them (Hackman and Oldham 1980). Positive meaning helps people retain a task focus even amidst setbacks and threats because it helps them to reassess their priorities and goals at work so they are aligned with what is important to them. Positive meaning helps individuals "reappraise an event as an opportunity for growth rather than a loss" (Davis et al. 1998, p. 563) so that they can keep a task focus even in the face of adversity. Second, positive meaning increases exploration. When individuals have access to positive meaning resources, they are likely to see the problems they encounter as important, and thus seek out novel solutions. Third, positive meaning also enables more heedful relating at work. Because meaning is often created in relations with others, others are likely to share this sense of meaning. As such, individuals will be likely to feel interdependent and thus able to support each other by relating heedfully (e.g., Sherif et al. 1961, Hackman 2002).

Positive Affective Resources. Positive affective resources can also fuel agentic working behaviors. Unlike negative emotions, which narrow thought-action repertoires, positive emotions facilitate approach behavior (Carver and Scheier 1990) and increase readiness to act (Forgas 1992). First, positive affective resources promote

a task focus: They enable individuals to engage with their environments. This is because positive emotions broaden an individual's momentary attention and thinking (Fredrickson 2003). With the aid of positive affective resources, people recover more quickly from setbacks and negative emotions (Fredrickson 1998) and can sustain their task focus. Second, positive affective resources have a particularly important influence on exploration. Positive emotions facilitate the exploration of novel objects, people, and situations because they broaden the array of thoughts and actions that come to mind (Fredrickson 1998). For example, joy encourages people to play, push the limits, and be creative. Interest broadens peoples' perspectives by creating the urge to explore. Third, positive affective resources increase heedful relating by broadening individuals' scope of attention (Fredrickson 1998). When individuals create positive emotions in relations with others, they are more likely to pay attention to what others are doing.

Relational Resources. Relational resources, too, promote two agentic behaviors—exploration and heedful relating. In terms of exploration, people who experience a high degree of connectivity with others create expansive emotional spaces that open possibilities for creativity and trying new things (Losada and Heaphy 2004). Relational resources facilitate employees' experimentation with new possible selves (Markus and Nurius 1986, Roberts et al. 2005) as well—this is because the connections provide psychological safety so employees can experiment and take risks with the goal of learning new ways of working (Edmondson 1999). In terms of heedful relating, Miller and Stiver (1997) show that positive connections increase a desire for more connections, and thus are likely to increase the likelihood that people will relate heedfully to others. When people have positive relationships with others at work, they will be more likely to take the needs of those colleagues into account as they are doing their own work. This ingrained pattern of reciprocity between people has been shown to be a powerful force in how relationships are sustained over time (Cialdini 2001).

In summary, our socially embedded model of thriving illuminates the thriving process by exploring how social structure and resources produced in the doing of work jointly enable thriving. The agentic working behaviors are the direct antecedents of thriving. These behaviors are enabled by work unit contextual features, and also by resources that individuals produce in the doing of work. In the next section of the paper, we discuss the implications of our model for theory and practice.

Thriving and Self-Adaptation at Work

This model of thriving allows us to see how certain contexts at work create the conditions that facilitate thriving. However, we also imply that thriving is a desirable and

informative state. By desirable, we mean that individuals are motivated to increase their thriving. By informative, we mean that individuals use thriving as a gauge for whether they are on a positive developmental path that is, whether they moving toward greater vitality and learning. Our assertion is that thriving functions as a type of subjective meter that individuals use to discern whether they are on or off track in their own development at work. This discernment need not be overly conscious and rational to have its effect on an individual's behavior. Rather, thriving at work is a coarse-grained indicator that one is developing in a positive direction; the presence of thriving as a subjective experience serves as a type of positive reinforcement for current contextual conditions (i.e., contextual conditions will be reinforced if they are perceived to enable a sense of thriving). This positive reinforcement draws people to seek behaviors and conditions that foster further thriving. In particular, we suggest that a sense of thriving encourages people to pursue behaviors that continue or increase this state, and in this way, helps people to navigate and architect work in ways that enable their thriving.

Our model highlights this self-adaptive process primarily through the feedback link between thriving at work and agentic behaviors (see the dotted line in Figure 1). When individuals are thriving, they continue to produce the agentic work behaviors in order to fuel sustained thriving. In our model, this means that individuals continue to focus on their tasks, explore, and heedfully relate to build resources that further reinforce their thriving. When thriving, individuals are likely to retain their task focus in order to function effectively. When thriving, individuals are also likely to engage in continued exploration behaviors. These exploration behaviors might include seeking out mentors or energizing communities of practice that in turn create additional resources to fuel sustained thriving. Finally, when thriving, individuals might find ways to craft their jobs to allow for more heedful relating to further fuel their thriving. For example, hospital cleaners engaged with patients' families during the course of doing routine tasks like emptying trash in order to help patients' families, and in turn made their work more personally meaningful (Wrzesniewski and Dutton 2001). Cleaners who were thriving used this sense of aliveness and learning in interactions with patients as a means to engage in more heedful relating to fuel more resources to promote continued thriving. In each of these ways, individuals who are thriving at work are more likely to engage in more agentic work behaviors to fuel sustained thriving.

Discussion

Our goal has been to develop a model to explain the social embeddedness of thriving at work, where thriving is defined as the psychological state in which individuals experience both vitality and learning. Although much

is known about the negative effects of work and work contexts on individuals, less is known about the positive influence that work contexts can have on employees, particularly in promoting employee development and health through individual thriving. Our paper contributes to the relatively sparse, but growing, literature on how work can contribute to positive individual and organizational outcomes (Cameron et al. 2003). In our discussion, we summarize the key theoretical implications of our model and offer directions for a future research agenda on thriving at work.

Theoretical Implications

A focus on thriving contributes to theory in several ways. First, our thriving model contributes to the literature on self-adaptation. Tsui and Ashford (1994) have argued that in today's complex world of work, we need to understand ways that people adapt themselves inside organizations beyond traditional regulatory models based on control. Our model provides new insights into how individuals can self-adapt in the context of work by their own attunement to psychological states like thriving and the conditions that foster it. It offers a perspective on adaptation that proposes that people are aware of their own senses of energy and learning (i.e., thriving), and can make changes based on these selfassessments. Our thriving model provides an alternative pathway for adaptation beyond the more formal and external mechanisms like performance appraisal, feedback, or incentive systems. Put another way, thriving theorizes that individuals hold the keys to their own adaptive capacities by reading their psychological states and crafting their work in order to increase feelings of learning and energy.

That individuals can use their internal feelings as a meaningful cue to either undertake change or persist with their current ways of working is a promising contribution of this research. Researchers may have overlooked individuals' own internal capabilities for gauging progress in their development at work. Whereas traditional approaches to development focus on creating the requisite structures and processes, such as performance appraisals, our research suggests that individuals can become more active agents in shaping the contexts that enable their thriving. In this way, our model of thriving is consistent with other research that construes employees as active crafters of their own development at work (e.g., Roberts et al. 2005, Tsui and Ashford 1994, Wrzesniewski and Dutton 2001).

Second, our paper develops a socially embedded model that begins to chart how, why, and when individuals experience thriving at work. This socially embedded view of thriving supports the idea that work organizations are consequential for individuals' growth, development, and health through the cultivation of thriving. In this sense, our work is consistent with and builds on

research in positive organizational scholarship (Cameron et al. 2003), which focuses on how work organizations can contribute to individuals' capability building and well-being.

Third, a related contribution comes from our articulation of a set of theoretical mechanisms that explains how work contexts and individuals can enable thriving at work. Although it is widely recognized that individual experiences in organizations are jointly shaped by characteristics of individuals and contexts, limited research recognizes both factors as important co-determinants of behavior (Colarelli et al. 1987). The model we build focuses on the contextual conditions that enable psychological states and behaviors that fuel vitality and learning. However, our model is not contextually deterministic. We show how individuals are not simply enabled by their contexts, but can also develop and renew their resources in the doing of their work, and in this way can actively shape their own vitality and learning and, subsequently, their development.

Fourth, our paper makes a contribution to the study of subjective experience at work. The majority of existing research on subjective experience at work focuses on job satisfaction, which represents a hedonic, or pleasurebased, approach to understanding subjective experience. The focus has been on the experience of pleasure and the absence of pain at work. Less research has taken a eudaimonic approach to understanding subjective experience at work (see Ryan and Deci 2001 for a review). A eudaimonic approach focuses on how individuals seek to develop their full potential (Waterman 1993). Thriving permits consideration of how organizations foster this form of well-being, and provides insight into the process by which individuals participate in the development of their full potential by attending to their subjective experiences at work. In this sense, by introducing a conceptualization of thriving, we expand how scholars can theorize about positive subjective experiences at work that bring together both hedonic and eudaimonic approaches.

Fifth, we build on recent efforts to acknowledge and use the concept of resources produced and altered in the doing of work as a means for understanding how individuals develop, grow, and attain outcomes in organizations (e.g., Feldman 2004, Roberts et al. 2005, Quinn and Dutton 2005, Worline et al. 2004). Consistent with the emphasis in positive organizational scholarship on the potential for endogenous resourcefulness, a focus on the range of resources produced in the doing of work helps scholars and practitioners see new potentialities that are present in many contexts. More specifically, we show how practice produces and changes, rather than consumes, resources. Consequently, one implication of this research is that it equips scholars with a model of how to understand resources in a wider range of organizational contexts, including those that would often be viewed as lacking resources using traditional approaches. As a result, it may be possible to understand how organizations that lack resources, based on traditional views, can still promote positive outcomes.

Future Research Directions

We have drawn from a broad range of related theory and research in building the model presented here, and because our model is preliminary, it naturally requires further refinement, development, and empirical testing. As a first and necessary step, we encourage empirical testing of the relationships and processes implied by our socially embedded model of thriving at work. Such a task requires the development of valid measures of thriving, its antecedent conditions, and outcomes. However, we would also encourage empirical testing of the implied model of employee adaptation that is made visible through consideration of thriving as a critical internal state that employees use to develop themselves at work. There are several other important aspects of thriving that, if addressed in future research, will help to enrich our understanding of thriving at work.

First, future research must more directly link thriving with human health. Much is known about the health-corroding aspects of work, but we know little about how work contexts can enable health. Although evidence is sparse, there are emerging clues about how work may enable positive health outcomes. For example, Turner et al. (2002) suggest that healthy work is enabled by work designs that engage employees. Keyes et al. (2001) suggest that positive health outcomes result from good leadership. A recent empirical study by Smith et al. (2002) also suggests that organizational dynamics (including employee-organization fit, respect, fairness, and absence of discrimination) positively contribute to employee health.

Second, future research should examine unit-level models of thriving. Our model focuses on how contexts affect individuals, not units. Future research can develop a better understanding of how unit and organizational thriving works and how individual thriving might enable thriving at collective levels. It is likely that unit thriving is more than a collection of thriving individuals. For example, for units to thrive, individual thriving cannot occur at the expense of the thriving of others or the learning and vitality of the collective.

Finally, future research should examine how individuals might sustain their thriving over the longer term by ensuring that their units have the contextual features that foster agentic ways of behaving. Thriving individuals are likely to be motivated to preserve conditions that promote agentic behavior. While most employees alone cannot alter a unit's contextual features, they can seek to preserve the features that foster thriving by supporting and exercising decision-making discretion, supporting and exercising broad information sharing, and

actively participating in the preservation of a climate of trust and respect. If employees sense that unit features are declining in their support of conditions for thriving, they may choose to exit the unit or exercise voice to try to create conditions that are more conducive to thriving. Future research should examine how individuals can shape the more enduring elements of their work contexts.

Conclusion

In this paper, we call attention to the paucity of research on the salutary effects of work contexts on individuals, and make a case for why scholars ought to pay more attention to how work contexts can enable individual thriving. Thriving helps us to better understand the positively deviant end of the spectrum of employees' experiences at work (Cameron et al. 2003), and may have important implications for employee health and development. We have developed a socially embedded model of thriving that shows how unit contextual features and resources created in the doing of work cultivate a set of agentic working behaviors. These behaviors bolster the creation of different kinds of resources that further promote agentic working behaviors. The notion that unit contextual features, agentic behaviors, and resources produced in the doing of work jointly enable individuals to thrive enhances our understanding of how social contexts and human agency interact to promote positive functioning at work.

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Endnotes

¹In this related empirical project, interviews were conducted with members of a variety of for-profit and not-for-profit organizations. Interviews focused on capturing participants' thriving stories (if any) at work, as well as the enablers, diminishers, and subjective outcomes of thriving experiences.

²This does not mean that to thrive at work individuals must simultaneously exploit current capabilities and explore new ways of doing things. Rather, we are suggesting, as others have (see Button et al. 1996), that to focus on one to the exclusion of the other can be detrimental in the long run.

References

- Alfredsson, L., C. L. Spetz, T. Theorell. 1985. Type of occupation and near-future hospitalization for myocardial infarction and some other diagnoses. *Internat. J. Epidemiology* 14 378–388.
- Amabile, T. M. 1993. Motivational synergy: Toward new conceptualizations of intrinsic and extrinsic motivation in the workplace. *Human Resource Management Rev.* **3** 185–201.
- Bandura, A. 1977. Social Learning Theory. Prentice-Hall Inc., Englewood Cliffs, NJ.
- Bandura, A. 1988. Self-regulation of motivation and action through goal systems. V. G. Hamilton, G. H. Bower, N. H. Frijda, eds. Cognitive Perspectives on Emotion and Motivation. NATO ASI Series D: Behavioural and Social Sciences, Vol. 44. Kluwer Academic Publishers, Dordrecht, Netherlands, 37–61.
- Bandura, A. 2001. Social cognitive theory: An agentic perspective. *Annual Rev. Psych.* **52** 1–16.
- Bergland, A., M. Kirkevold. 2001. Thriving—A useful theoretical perspective to capture the experience of well-being among frail elderly in nursing homes? *J. Adv. Nursing* **36** 426–432.
- Bowen, D. E., C. Ostroff. 2004. Understanding HRM-firm performance linkages: The role of "strength" of the HRM system. *Acad. Management Rev.* **29** 203–221.
- Bowlby, J. 1979. The Making and Breaking of Affectional Bonds. Tavistock, London, UK.
- Brockner, J., E. T. Higgins. 2001. Regulatory focus theory: Its implications for the study of emotions in the workplace. *Organ. Behavior Human Decision Processes* **86** 35–66.
- Brown, J. S., P. Duguid. 1991. Organizational learning and communities of practice: Towards a unified theory of working, learning and innovation. *Organ. Sci.* **2** 40–57.
- Brown, K. W., R. M. Ryan. 2003. The benefits of being present: The role of mindfulness in psychological well-being. *J. Personality Soc. Psych.* **84** 822–848.
- Brown, S. L., R. M. Nesse, A. D. Vinokur, D. M. Smith. 2003. Providing social support may be more beneficial than receiving it: Results from a prospective study of mortality. *Psych. Sci.* 14 320–327.
- Bunderson, J. S., K. M. Sutcliffe. 2002. Why some teams emphasize learning more than others: Evidence from business unit management teams. M. Neal, E. Mannix, H. Sondak, eds. *Research on Managing Groups and Teams*, Vol. 4. Elsevier Science, New York, 49–84.
- Button, S. B., J. E. Mathieu, D. M. Zajac. 1996. Goal orientation in organizational research: A conceptual and empirical foundation. *Organ. Behavior Human Decision Processes* 67 26–48.
- Cameron, K. S., J. E. Dutton, R. E. Quinn. 2003. *Positive Organizational Scholarship: Foundations of a New Discipline*. Berrett-Koehler, San Francisco, CA.
- Carlson, M., V. Charlin, N. Miller. 1988. Positive mood and helping behavior: A test of six hypotheses. J. Personality Soc. Psych. 55 211–229.
- Carver, C. S. 1998. Resilience and thriving: Issues, models, and linkages. J. Soc. Issues 54 245–266.
- Carver, C. S., M. F. Scheier. 1990. Principles of self-regulation: Action and emotion. E. T. Higgins, R. M. Sorrentino, eds. *Handbook of Motivation and Cognition*, Vol. 2. Guilford, New York, 3–52.
- Chaplin, W. F., O. P. John, L. R. Goldberg. 1988. Conceptions of states and traits: Dimensional attributes with ideals as prototypes. J. Personality Soc. Psych. 54 541–557.
- Christianson, M., G. Spreitzer, K. Sutcliffe, A. Grant. 2005. An empirical examination of thriving at work. *National Acad. Management Meeting*, Hawaii.

- Cialdini, R. B. 2001. Influence: Science and Practice. Allyn and Bacon, Boston, MA.
- Colarelli, S. M., R. A. Dean, C. Konstans. 1987. Comparative effects of personal and situational influences on job outcomes of new professionals. J. Appl. Psych. 72 558–566.
- Csikszentmihalyi, M. 1975. Beyond Boredom and Anxiety. Jossey-Bass, San Francisco, CA.
- Csikszentmihalyi, M. 1990. Flow: The Psychology of Optimal Experience. Harper Collins, New York.
- Danna, K., R. W. Griffin. 1999. Health and well-being in the work-place: A review and synthesis of the literature. *J. Management* **25** 357–384.
- Davis, C. G., S. Nolen-Hoeksema, J. Larsen. 1998. Making sense of loss and benefiting from the experience: Two construals of meaning. J. Personality Soc. Psych. 75 561–574.
- De Dreu, C. K. W., L. R. Weingart. 2003. Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. J. Appl. Psych. 88 741–749.
- Deci, E. L., R. M. Ryan. 2000. The what and why of goal pursuits: Human needs and the self-determination of behavior. *Psych. Inquiry* **11** 227–268.
- Diener, E., E. M. Suh, R. E. Lucas, H. Smith. 1999. Subjective well-being: Three decades of progress. *Psych. Bull.* **125** 276–302.
- Dutton, J. E. 2003. Energize Your Workplace: How to Create and Sustain High Quality Connections at Work. Jossey-Bass, San Francisco, CA.
- Dutton, J. E., E. Heaphy. 2003. The power of high quality connections. K. S. Cameron, J. E. Dutton, R. E. Quinn, eds. *Positive Organizational Scholarship: Foundations of a New Discipline*. Berrett-Koehler, San Francisco, CA.
- Dweck, C. S. 1986. Motivational processes affecting learning. Amer. Psychologist 41 1040–1048.
- Edmondson, A. 1999. Psychological safety and learning behavior in work teams. *Admin. Sci. Quart.* 44 350–383.
- Elliott, E. S., C. S. Dweck. 1988. Goals: An approach to motivation and achievement. *J. Personality Soc. Psych.* **54** 5–12.
- Elster, J. 1998. A plea for mechanisms. P. Hedström, R. Swedberg, eds. Social Mechanisms: An Analytical Approach to Social Theory. Cambridge University Press, Cambridge, UK, 45–73.
- Ettner, S. L., J. Grzywacz. 2001. Workers' perceptions of how jobs affect health: A social ecological perspective. *J. Occupational Health Psych.* 6 101–113.
- Feldman, M. S. 2004. Resources in emerging structures and processes of change. *Organ. Sci.* **15** 295–309.
- Finkelstein, S., D. Hambrick. 1990. Top management team structure and organizational outcomes: The moderating role of managerial discretion. *Admin. Sci. Quart.* **35** 484–503.
- Forgas, J. P. 1992. Affect in social judgments and decisions: A multiprocess model. Adv. Experiment. Soc. Psych. 215 227–275.
- Fredrickson, B. L. 1998. What good are positive emotions? *Rev. General Psych.* **2** 300–319.
- Fredrickson, B. L. 2003. The value of positive emotions. *Amer. Scientist* **91** 330–335.
- Frost, P. J. 2003. *Toxic Emotions at Work: How Compassionate Managers Handle Pain and Conflict*. Harvard Business School Press, Boston, MA.
- George, J. M., K. Bettenhausen. 1990. Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. J. Appl. Psych. 75 698–709.
- Gherardi, S., D. Nicolini, F. Odella. 1998. Toward a social understanding of how people learn in organizations: The notion of

- situated curriculum. Management Learn. 29 273-297.
- Hackman, J. R. 2002. Leading Teams: Setting the Stage for Great Performances. Harvard Business School Press, Boston, MA.
- Hackman, J. R., C. G. Morris. 1975. Group tasks, group interaction process, and group performance effectiveness: A review and proposed integration. L. Berkowitz, ed. Advances in Experimental Social Psychology, Vol. 8. Academic Press, New York, 45–99.
- Hackman, J. R., G. Oldham. 1980. Work Redesign. Addison-Wesley, Reading, MA.
- Hall, D. T., C. V. Fukami. 1979. Organization design and adult learning. B. M. Staw, ed. Research in Organizational Behavior, Vol. 1. JAI Press, Greenwich, CT, 125–168.
- Hedström, P., R. Swedberg. 1998. Social mechanisms: An introductory essay. P. Hedström, R. Swedberg, eds. Social Mechanisms: An Analytical Approach to Social Theory. Cambridge University Press, Cambridge, UK, 1–31.
- Hochschild, A. R. 1997. The Time Bind: When Work Becomes Home and Home Becomes Work. Metropolitan Books, New York.
- Kanfer, R. 1990. Motivation and individual differences in learning: An integration of developmental, differential and cognitive perspectives. *Learning Individual Differences* 2 221–239.
- Kaplan, R., S. Kaplan. 1995. The Experience of Nature: A Psychological Perspective. Ulrich's Books Inc., Ann Arbor, MI.
- Keyes, C. L. M. 2002. The mental health continuum: From languishing to flourishing in life. J. Health Soc. Behavior 43 207–222.
- Keyes, C. L. M., J. Haidt, eds. 2002. Flourishing: Positive Psychology and the Life Well-Lived. American Psychological Association, Washington, D.C.
- Keyes, C. L. M., S. J. Hysom, K. L. Lupo. 2001. The positive organization: Leadership legitimacy, employee well-being, and the bottom line. *Psychologist-Manager J.* 4 143–153.
- Kinicki, A. J., F. M. McKee, K. J. Wade. 1996. Annual review, 1991–1995: Occupational health. *J. Vocational Behavior* **49** 190–220.
- Kolb, D. A. 1984. Experiential Learning: Experience as the Source of Learning and Development. Prentice Hall, Englewood Cliffs, NJ.
- Lawler, E. E. 1992. The Ultimate Advantage: Creating the High Involvement Organization. Jossey-Bass, San Francisco, CA.
- Lawler, E. J., J. Yoon. 1998. Network structure and emotion in exchange relationships. Amer. Sociological Rev. 63 871–894.
- Lee, F., A. Edmondson, S. Thomke, M. Worline. 2004. Promoting experimentation in organizational knowledge creation: Effects of status, values and rewards. *Organ. Sci.* 15 310–326.
- Losada, M., E. Heaphy. 2004. The role of positivity and connectivity in the performance of business teams: A nonlinear dynamics model. *Amer. Behavioral Scientist* 47 740–765.
- Markus, H., P. Nurius. 1986. Possible selves. Amer. Psychologist 41 954–969.
- Maslach, C., M. P. Leiter. 1997. The Truth About Burnout: How Organizations Cause Personal Stress and What to Do About It. Jossey-Bass, San Francisco, CA.
- Maslow, A. 1998. Maslow on Management. John Wiley & Sons, Inc., New York.
- Masten, A. S., M. J. Reed. 2002. Resilience in development. C. R. Snyder, S. J. Lopez, eds. *Handbook of Positive Psychology*. Oxford University Press, New York, 74–88.
- Mayer, R. C., J. H. Davis, F. D. Schoorman. 1995. An integrative model of organizational trust. Acad. Management Rev. 20 709–734.

- Miller, J. B., I. P. Stiver. 1997. The Healing Connection: How Women Form Relationships in Therapy and in Life. Beacon Press, Boston, MA.
- Mitchell, T. R., D. Daniels. 2003. Motivation. W. C. Borman, D. R. Ilgen, R. J. Klimoski, eds. *Industrial and Organizational Psychology. Handbook of Psychology*, Vol. 12. John Wiley, New York, 225–254.
- Moreland, R. L., L. Argote. 2003. Transactive memory in dynamic organizations. R. Peterson, E. Mannix, eds. *Leading and Man*aging People in the Dynamic Organization. Erlbaum, Mahwah, NJ. 135–162.
- Nix, G., R. M. Ryan, J. B. Manly, E. L. Deci. 1999. Revitalization through self-regulation: The effects of autonomous and controlled motivation on happiness and vitality. *J. Experiment. Soc. Psych.* 25 266–284.
- Orlikowski, W. 2002. Knowing in practice: Enacting a collective capability in distributed organizing. *Organ. Sci.* 13 249–273.
- Parker, S. K., C. A. Sprigg. 1999. Minimizing strain and maximizing learning: The role of job demands, job control, and proactive personality. *J. Appl. Psych.* 84 925–939.
- Parker, S. K., T. D. Wall, P. R. Jackson. 1997. That's not my job: Developing flexible employee work orientations. *Acad. Management J.* 40 899–929.
- Porath, C., T. Bateman. Self-regulation: Goal orientation to performance. *J. Appl. Psych.* Forthcoming.
- Potter, P. T., B. W. Smith, K. R. Strobel, A. J. Zautra. 2002. Interpersonal workplace stressors and well-being: A multi-wave study of employees with and without arthritis. *J. Appl. Psych.* 87 789–796.
- Pratt, M. G., B. E. Ashforth. 2003. Fostering meaningfulness in working and at work. K. S. Cameron, J. E. Dutton, R. E. Quinn, eds. *Positive Organizational Scholarship: Foundations of a New Discipline*. Berrett-Koehler, San Francisco, CA, 309–327.
- Quinn, R. W., J. E. Dutton. 2005. Coordination as energy-inconversation: A process theory of organizing. Acad. Management Rev. 30(1) 38–57.
- Rhoades, L., R. Eisenberger. 2002. Perceived organizational support: A review of the literature. *J. Appl. Psych.* **87** 698–714.
- Roberts, L. M., J. E. Dutton, G. Spreitzer, E. Heaphy, R. E. Quinn. 2005. Composing the reflected best self: Building pathways for becoming extraordinary in work organizations. *Acad. Manage*ment Rev. 30(4) 712–736.
- Ryan, R. M., E. L. Deci. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. Amer. Psychologist 55 68–78.
- Ryan, R. M., E. L. Deci. 2001. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. Annual Rev. Psych. 52 141–166.
- Ryff, C. D. 1989. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J. Personality Soc. Psych.* 57 1069–1081.
- Ryff, C., B. Singer. 1998. The role of purpose in life and personal growth in positive human health. P. T. P. Wong, S. P. Fry, eds. *The Quest for Meaning*. Erlbaum Associates, Mahwah, NJ, 213–235.
- Schor, J. 1993. The Overworked American: The Unexpected Decline of Leisure. Basic Books, New York.
- Sherif, M., O. J. Harvey, B. J. White, W. R. Hood, C. W. Sherif. 1961. Intergroup Conflict and Cooperation: The Robbers' Cave Experiment. Oklahoma Book Exchange, Norman, OK.
- Smith, K. K., D. L. Eldrige, D. S. Kaminstein, P. D. Allison. 2002. Corporate health revisited: An update on illness and organizational dynamics. J. Appl. Behavioral Sci. 38 177–190.

- Sonenshein, S., J. Dutton, A. Grant, G. Spreitzer, K. Sutcliffe. 2005. Narratives of growth at work: Learning from employees' stories. Working paper, Ross School of Business, University of Michigan, Ann Arbor, MI.
- Spector, P. E., D. J. Dwyer, S. M. Jex. 1988. Relation of job stressors to affective, health, and performance outcomes: A comparison of multiple data sources. *J. Appl. Psych.* 73 11–19.
- Spreitzer, G. M. 1995. Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Acad. Management J.* **38** 1442–1465.
- Spreitzer, G. M. 1996. Social structural levers to individual empowerment in the workplace. *Acad. Management J.* **39** 483–504.
- Sutcliffe, K. M., T. J. Vogus. 2003. Organizing for resilience. K. S. Cameron, J. E. Dutton, R. E. Quinn, eds. *Positive Organizational Scholarship: Foundations of a New Discipline*. Berrett-Koehler, San Francisco, CA, 94–121.
- Tedeschi, R. G., L. G. Calhoun. 2004. Posttraumatic growth: Conceptual foundations and empirical evidence. *Psych. Inquiry* **15** 1–18
- Tsui, A. S., S. J. Ashford. 1994. Adaptive self-regulation: A process view of managerial effectiveness. J. Management 20 93–121.
- Turner, N., J. Barling, A. Zacharatos. 2002. Positive psychology at work. C. R. Snyder, S. J. Lopez, eds. *Handbook of Positive Psychology*. Oxford University Press, New York, 715–728.
- van der Ploeg, E., S. M. Dorresteijn, R. J. Kleber. 2003. Critical incidents and chronic stressors at work: Their impact on forensic doctors. J. Occupational Health Psych. 8 157–166.
- Vigoda, E. 2002. Stress-related aftermaths to workplace politics: The relationship among politics, job distress, burnout, and aggressive behavior in organizations. J. Organ. Behavior 23 571–591.
- Vogus, T. J. 2004. In search of mechanisms: How do HR practices affect organizational performance? Unpublished doctoral dissertation, University of Michigan, Ann Arbor, MI.
- Waterman, A. S. 1993. Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. J. Personality Soc. Psych. 64 678–691.
- Weick, K. E., K. Roberts. 1993. Collective mind in organizations: Heedful interrelating on flight decks. Admin. Sci. Quart. 38 357–381.
- Weick, K. E., K. M. Sutcliffe. 2001. Managing the Unexpected: Assuring High Performance in an Age of Complexity. Jossey Bass, San Francisco, CA.
- Weick, K. E., K. M. Sutcliffe, D. Obstfeld. 1999. Organizing for high reliability: Processes of collective mindfulness. B. Staw, L. L. Cummings, eds. Research in Organizational Behavior, Vol. 21. JAI Press, Greenwich, CT, 81–123.
- Wenger, E. 1998. Communities of Practice: Learning, Meaning and Identity. Cambridge University Press, New York.
- Wood, R., A. Bandura. 1989. Social cognitive theory of organizational management. *Acad. Management Rev.* **14** 361–384.
- Worline, M., J. E. Dutton, P. Frost, J. Lilius, J. Kanov. 2004. Fertile soil: The organizing dynamics of resilience in work organizations. Working paper, University of Michigan, Ann Arbor, MI.
- Wright, T. A., D. G. Bonett. 1997. The contribution of burnout to work performance. *J. Organ. Behavior* **18** 491–499.
- Wright, T. A., R. Cropanzano. 1998. Emotional exhaustion as a predictor of job performance and voluntary turnover. *J. Appl. Psych.* 83 486–493.
- Wrzesniewski, A., J. E. Dutton. 2001. Crafting a job: Revisioning employees as active crafters of their work. Acad. Management Rev. 26 179–201.