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Personal Resources and Work Engagement in the Face of Change

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Introduction

Organizations are continuously changing. Developments in society such as the current financial crisis and ongoing technological innovation increase pressure on employees to show change-ability and resilience. Most planned change initiatives, whether they concern a restructuring, cultural change, or policy innovation, share the aim of maximizing organizational performance. Recently, organizations have begun to refer to the "new world of work" indicating a digital work style characterized by flexible hours and no fixed locations (Microsoft, 2005). The ideal "new" employee is a self-directed, proactive, networking entrepreneur, taking responsibility for his or her own performance and development. Innovative IT systems aim to make working life easier and support employee productivity. However, the pace of change is high and multiple change efforts often coincide and overlap, adding to the demands on employees' adaptive capacities (Herold, Fedor, & Caldwell, 2007). Change *processes* have become a stressor irrespective of the *content* of the change (Korunka, Weiss, & Karetta, 1993).

In order to successfully implement change, many factors at many levels (societal, organizational, departmental, individual) need to be managed simultaneously (Armenakis, Harris, & Mossholder, 1993; Fernandez & Rainey, 2006). However, considering that ultimately work is carried out by employees, individual knowledge, attitudes and behavior are crucial aspects of any change endeavor (Woodman & Dewett, 2004). In spite of this, most empirical organizational change studies have focused on macrolevel factors. Empirical studies that do include employee-level variables tend to focus on the influence of organizational factors on attitudinal outcome

variables (e.g., resistance to change). Organizational change research has not sufficiently included the role of individual resources in successful change implementation (Armenakis & Bedeian, 1999; Judge, Thoresen, Pucik, & Welbourne, 1999).

Therefore, in line with the positive approach to studying employee development and performance in organizations (Bakker & Schaufeli, 2008; Luthans, Youssef, & Avolio, 2007), we focus in this chapter on the sustainability of work engagement during change. We aim to advance the knowledge of antecedents of healthy organizational change, both from an organizational and employee perspective. This chapter provides an overview of the role of personal resources in the process of positive adaptation to change. Also, we present a research model that offers a micro-level framework for studying how personal resources are related to work engagement and performance during change.

Healthy Organizational Change

Three themes can be distinguished in change research, reflecting the multiple processes involved in organizational change (Armenakis & Bedeian, 1999). First, research on organizational *context* variables examines the work environment (internal context) or broader societal (external) contexts. Internal context (e.g., working conditions, support, or culture) is relevant to our focus on the employee level. Secondly, *process* variables refer to how the change is implemented, for example, in terms of employee participation and information provided. Thirdly, the *content* theme reflects studies on the substance of change (e.g., strategic change, performance-incentives, etc.) and its relationship with organizational effectiveness. In line with Holt, Armenakis, Field, and Harris (2007), we include a fourth theme – namely, individual characteristics and, specifically, personal resources. We will first focus on how work environments influence well-being and performance at work, before turning to the individual factors that are important for healthy organizational change.

Effects of change on employees

Many change initiatives do not reach their objectives within the given timeframe, partly due to individual reactions to change (Sorge & Van Witteloostuijn, 2004). How does change affect employees? First, organizational change has an impact on the working environment and subsequently it may affect employee well-being, motivation, and performance. Studies have focused on the mediating role of psychosocial working conditions, and their subsequent impact on health and well-being. For example, it was shown that when employees perceived a reduction in decision latitude and an increase in job demands, they were more likely to go on long term sickness absence. In contrast, an increase in support at work led employees to have fewer long spells of sickness absence (Head et al., 2006; Vahtera, Kivimaki, Pentti, & Theorell, 2000). Amabile & Conti (1999) showed that changes due to downsizing negatively impacted creativity-enhancing aspects of the work environment, i.e., freedom, challenge, resources,

encouragement, and support. Individual characteristics may explain or buffer the effects of organizational change (Judge et al.,1999; Wanberg & Banas, 2000).

Secondly, *how* change is implemented can affect employee health. This has been studied by focusing on change process characteristics, often leading to practitioner guidelines (Armenakis & Bedeian, 1999). For example, in a recent study by Saksvik et al. (2007), five implementation criteria for healthy organizational change were identified. The criteria were: (1) awareness of norms and how imposed change may conflict with unwritten rules, (2) awareness of diversity, or how different departments may respond differently to change, (3) manager availability, for support and information, 4) constructive conflict, whereby resistance is welcomed and dealt with rather than avoided, emphasizing dialogue regarding the change, and 5) role clarification, similar to role clarity, a job resource (e.g., Abramis, 1994) that becomes even more important in times of transition. Organizational change will nearly always include new ways of working, new roles and new ways of relating to others. These points are linked to our focus on the interplay of the changing work environment and the individual. First, the diversity in change reactions and use of constructive conflict underlines the importance of taking into account individual factors. Secondly, awareness of norms, role clarification and manager availability underline the importance of job demands and resources.

Job demands–resources model

Our approach is based on the assumptions of the job demands–resources model (JD–R) model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). This model (see Figure 7.1) provides a framework for studying the
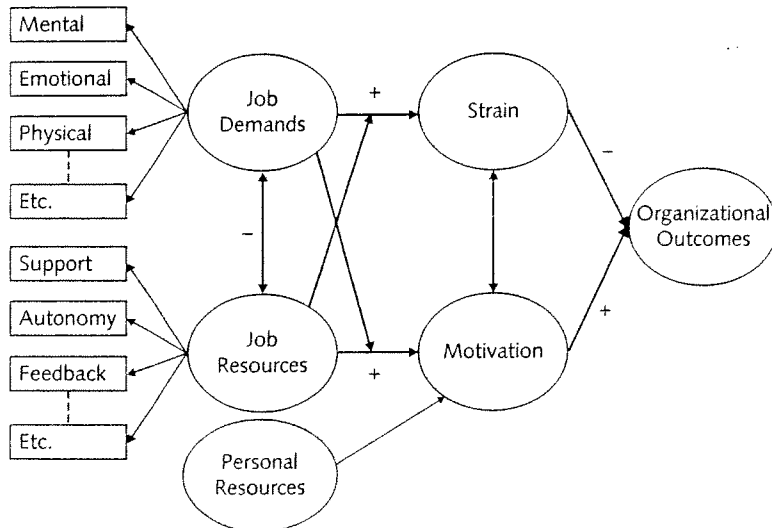

Figure 7.1   Job Demands–Resources model (adapted from Bakker & Demerouti, 2007, 2008)

processes by which work environment factors determine well-being and motivation, often operationalized as burnout and engagement. The JD–R model proposes that each workplace has its own unique demands and resources. *Job demands* refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skill and are therefore associated with physiological and/or psychological costs. Examples are high work pressure, unfavourable physical environments, or emotionally demanding client interactions. Job demands are not necessarily negative; however, they may turn into job stressors when meeting those demands requires high effort from which the employee cannot adequately recover (Meijman & Mulder, 1998). *Job resources* are defined as those physical, psychological, social or organizational aspects of the job that may do any of the following: (1) are functional in achieving work related goals, (2) reduce job demands and the associated physiological and psychological costs, and (3) stimulate personal growth and development. Studies using the JD–R model have shown the positive impact of job resources on work engagement and subsequent performance (Bakker & Demerouti, 2007, 2008; Bakker, Schaufeli, Leiter, & Taris, 2008; Schaufeli & Salanova, 2007).

The JD–R model was recently expanded to include personal resources (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Recent studies show the important role of personal resources in explaining why job resources are translated into engagement and in turn, job performance (Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli, 2008; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a, 2009b). Personal resources mediated the relationship between job resources and work engagement/exhaustion. Moreover, personal resources influenced the perception of job resources over time and predicted objective financial turnover via work engagement.

As of yet, the JD–R model has not been tested in dynamic work environments. In this chapter we propose a framework that allows us to test the JD–R model in changing work environments. First, we outline the nature of personal resources.

What Are Personal Resources?

Interest in personal resources originates in stress and coping research. As research showed that there were no fixed associations between stressful life events and distress, attention shifted to mediators in the stress process, e.g., personal resources (Rabkin & Streuning, 1976). Personal resources have been described as "aspects of the self that are generally linked to resiliency" (Hobfoll, Johnson, Ennis, & Jackson, 2003, p. 632). Many researchers use similar concepts, for example, psychological resources (Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000), psychological capital (Luthans & Youssef, 2004), personal coping resources (Aldwin, Sutton, & Lachman, 1996; Wheaton, 1983), and general resistance resources (Antonovsky, 1979). What is less clear in the broad definition is the ontological status of the umbrella-term "resources". What are the defining attributes of a personal resource and how do they

relate to personality traits, states and coping styles? In order to add to the conceptu-alization of the term "personal resources" we propose a more detailed definition.

Key attributes of personal resources

Inherent in the term "resource" is a reference to it being a means of supplying a want or deficiency. What value the resource has is closely linked to the value of the outcome that it will produce or contribute towards (Ashford, 1986). "Personal" in personal resources refers to the idea that individual characteristics can function as a means of dealing with the outside world (Hobfoll, 1986). Personal resources refer to a person-environment interplay and can pertain to a specific domain, e.g., work-related self-efficacy. In personality research and occupational health psychology the importance of this interplay of person and (work) environment is widely accepted. Mischel (2004) states that in order to advance our knowledge of human behavior, the focus should be on patterns that can be found when studying the person–situation interaction.

Semantic definitions of the word "resource" include that resources (1) are useful in coping with (adverse) situations, and (2) add to the creation of a more favorable situation or goal attainment. Pearlin and Schooler (1978) defined psychological resources as "the personality characteristics that people draw upon to help them withstand threats posed by events and objects in their environment" (p.5). In occupational health psychology, studies have shown that the positive influence of personal resources is particularly salient at times when resources are needed, for example, during stressful events (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Callan, Terry, & Schweitzer, 1994; Hakanen, Bakker, & Demerouti, 2005; Hobfoll, 2002). Therefore a key attribute of personal resources is that they facilitate goal attainment in the face of adversity.

Personal resources can be measured both as traits and states; however, most studies take a state-perspective. In order to develop interventions, it is relevant to focus on characteristics that are malleable. Personal resources can be developed over time, influenced by significant life experiences and specific personal development interventions or coaching (Luthans, Avey, Avolio, Norman, & Combs, 2006; Lyubomirsky, Sousa, & Dickerhoof, 2006). Jerusalem (1993) refers to personal resources as self-beliefs and commitments. Personal resources can have both affective and cognitive components and are often valued in their own right (e.g., self-esteem: a combination of positive beliefs about intrinsic self-worth accompanied by positive affect). Personal resources can be considered as lower-order, malleable elements of personality (Gist & Mitchell, 1992).

Personality traits may influence the ease with which personal resources are developed. For example, people who are high on extraversion may be more likely to think optimistically than people who are low on extraversion. However, regardless of traits, it is possible to develop optimistic explanatory styles (Seligman, 1991). In our view, the mobilization of personal resources takes place as follows: when confronted with adversity or ambiguous events, underlying traits influence the presence of

lower-order cognitive/affective states. In a stressful situation, these states either function as personal resources or as vulnerability factors (characteristics that increase a person's vulnerability to the adverse impact of stressors). These states influence the perception of the situation and, in turn, how a person will manage the situation (strategies).

We propose the following working definition for the concept of personal resources in organizational settings:

> Personal resources are lower-order, cognitive-affective aspects of personality; developable systems of positive beliefs about one's "self" (e.g., self-esteem, self-efficacy, mastery) and the world (e.g., optimism, faith) which motivate and facilitate goal-attainment, even in the face of adversity or challenge.

Personal Resources at Work

There is a growing tendency in occupational health psychology to focus on personal resources. Personal resources have been studied in relation to the work environment and in relation to outcomes such as performance, job satisfaction, commitment and work engagement. A number of theories have included personal resources and their influence on well-being and performance.

First, *cognitive adaptation theory* states that individuals who are able to adjust well to stressful life events are those who are high on optimism, self-esteem and personal control (Taylor, 1983). The theory proposes that the process of adjustment to threatening events is structured around the processes of (1) searching for meaning in the experience, (2) attempting to gain control of the situation in order to restore a general sense of mastery over one's life and (3) restoring self-esteem through self-enhancing evaluations (Taylor, 1983). This theory is mostly used in health psychology studies (e.g., Helgeson, 1999, 2003). However, it has also been applied to the study of organizational change, where it was found that personal resources predicted openness to change (Wanberg & Banas, 2000).

Another approach to personal resources in the workplace is Positive Organizational Behavior (POB), which focuses on positive attributes of people and organizations (Bakker & Schaufeli, 2008; Luthans, 2002). POB was introduced 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, Youssef, & Avolio, 2007, p.10). *Psychological Capital* or "PsyCap" was introduced as a higher order construct that operationalizes the individual component of POB, including self-efficacy, hope, optimism and resilience (Luthans & Youssef, 2004). In contrast with signature strengths and virtues (Peterson & Seligman, 2004), PsyCap constructs are operationalized as developable states (Luthans, Avolio, Avey, & Norman, 2007). Even though some concerns have been raised about PsyCap's discriminant validity (Little, Gooty, & Nelson, 2007), PsyCap has been found to predict work-related performance

and job satisfaction, both as a higher-order construct and the components individu-
ally (Luthans, Avolio, Walumbwa, & Li, 2005; Luthans, Norman, Avolio, & Avey,
2008). Below we describe the four personal resources used in the PsyCap construct.
In addition, two other relevant resources (meaning-making and regulatory focus)
are briefly described.

Optimism

Optimism has been defined as generalized, positive outcome expectancies (Scheier
& Carver 1985). Optimism has also been approached as an explanatory style, which
indicates a tendency to attribute causes of negative events to external, transient cir-
cumstances, rather than personal factors (Seligman, 1991). Optimism can be meas-
ured either state-like or trait-like, and in general or work-related terms, depending
on the research question. Optimism has been shown to predict academic perform-
ance (Peterson & Barrett, 1987), effective coping with life stressors (Nolen-Hoeksema,
2000), successful management of stressors (Aspinwall & Taylor, 1997), physical
health (Peterson, 2000), and work productivity (Seligman & Schulman, 1986). The
PsyCap measure reflects work-related optimism. In a recent study, optimism was
found to (partially) mediate the relationship between job resources and work
engagement, and indirectly influenced organizational performance (Xanthopoulou
et al., 2009b).

Hope

Related to optimism, the concept of hope has been defined as the ability to plan
pathways to desired goals despite obstacles, and the agency or motivation to use
these pathways (Snyder, 2000). Hope is viewed as a result of these two components,
and as such differs from the lay person's meaning of "hope". This definition has an
active nature, in that it speaks of motivation to use the ability to plan. This motiva-
tional and agency component of hope suggests some overlap with self-efficacy.
Peterson & Luthans (2003) showed that hope can influence financial performance.
In order to build hope, the focus needs to be both on goal setting and building path-
ways towards these goals. Empowerment and mental rehearsal are ways of enhanc-
ing sense of control and finding pathways to attain goals (Snyder, 2000).

Resilience

Resilience refers to the ability to bounce back from adverse events, or cope success-
fully (Rutter, 1985). The interest in resilience originates from the field of develop-
mental psychology (Masten, 2001). Resilience is related to processes of adaptation
under stress, or the capacity to maintain positive outcomes in the face of negative
life events (Ryff & Singer, 1996). Resilience can be measured as a trait, for example,
ego-resiliency (Block & Kremen, 1996), indicating general resourcefulness regard-
less of the situation (Earvolino-Ramirez, 2007). Over the past two decades, resilience

has also been used to indicate a dynamic, modifiable process that occurs during exposure to adversity (Luthar, Cicchetti, & Becker, 2000). Positive relationships, assertiveness, self-worth, sense of humor, and decision-making abilities have been identified as protective factors within the resilience process (Earvolino-Ramirez, 2007). The process of resilience can be built using cognitive coaching interventions (Luthans, et al., 2006). Resilience is slightly different from the other PsyCap constructs in that it always has an object, i.e., resilience is a response to a situation.

Self-efficacy

Self-efficacy is one of the most studied personal resources and has been extensively used in research in educational, clinical, and organizational settings (Hodgkinson & Healey, 2007). Derived from Bandura's social learning theory, the construct is concerned with how knowledge influences action. Perceived self-efficacy is defined as judgments about how capable one is of organizing different skills in order to execute appropriate courses of action to deal effectively with the environment (Bandura, 1989, 1997), or beliefs about one's ability to mobilize the relevant resources to meet situational demands (Gist & Mitchell, 1992). It is a dynamic construct, i.e., the beliefs or judgments can change over time. Self-efficacy influences thought-patterns, emotions, and actions, and as such it is a motivational construct. In work settings, significant correlations have been found between self-efficacy and work performance (Stajkovic & Luthans, 1998).

Meaning-making

Many influential theorists have acknowledged the importance of being able to experience meaning for optimal human functioning (Baumeister & Vohs, 2002; Frankl, 1963; Jahoda, 1958; Maslow, 1968; Rogers, 1961). Research has shown that an ability to make meaning, (i.e., to understand why an event has occurred and what its impact is) when faced with adversity can be beneficial to both mental and physical health (Frankl, 1963; Taylor et al., 2000).

Recently, interest in the study of meaning at work has increased. Many studies focus on the importance of meaningful work for organizational outcomes (e.g., Chalofsky, 2003; Cartwright & Holmes, 2006; May, Gilson, & Harter, 2004; Wrzesniewski, Dutton, & Debebe, 2003). What personal resource or strategy leads to the experience of meaningful work? Our view is that deliberate efforts to reflect on what happens at work and the ability to link this to broader values and life goals is a form of meaning-making that can help employees deal with ongoing change. In line with other theories, we view employees as self-regulating, active agents (Bandura, 1989; Bell & Staw, 1989; Wrzesniewski & Dutton, 2001). In deliberate meaning-making, ambiguous or challenging events are integrated into a framework of personal meaning, values and goals, which results in a sense of meaningfulness. Meaning-making is viewed as a cognitive/affective resource that one can develop. Recently, we developed a scale to capture the degree to which people engage in

meaning-making (Van den Heuvel, Demerouti, Schreurs, Bakker, & Schaufeli, 2009). Meaning-making was shown to be related to willingness to change and in-role performance. We expect that meaning-making will facilitate positive attitudes to change and motivation to engage with the changed situation, resulting in more work engagement and enhanced performance.

Self-regulatory focus

Regulatory focus theory (Brockner & Higgins, 2001) states that people can operate in two distinct self-regulatory foci. A *promotion focus* indicates a tendency to perceive the environment in terms of growth and development opportunities (approach), while *prevention-focused* individuals are motivated by security needs and focus on avoiding risks and threats (avoidance). These tendencies may influence appraisal in change situations. Regulatory focus can be studied both as state or trait; chronic regulatory focus pertains to a dispositional focus, while situational regulatory focus is influenced by situational factors (Brockner & Higgins, 2001). The regulatory fit between the type of regulatory cues in the situation and the regulatory focus of the person is central to the theory. Both promotion and prevention are associated with positive outcomes, although some negative correlates of prevention focus have been noted, while for promotion focus, mainly beneficial impacts are emphasized (Brockner & Higgins, 2001; Dewett & Denisi, 2007; Kark & Van Dijk, 2007). Therefore, we propose that a promotion focus may function as a personal resource during change. The different foci will influence how employees perceive changes in work processes. In turn, this may influence how change demands and resources are dealt with.

Personal Resources and Organizational Change

As described above, and recognized by many authors in the management literature (Kotter, 1996, 2005; Stewart-Black & Gregersen, 2008), ultimately it is not organizations as entities that change, it is the people who are part of the organizations who change (Bovey & Hede, 2001, Woodman & Dewett, 2004). Obviously, employees need the right knowledge, skills and tools in order to work in the new ways that the organizational change imposes. However, in addition to this, the role of personal resources in change contexts should be explored. Individual characteristics have been included in the study of organizational change in different ways. Besides the studies that included attitudes, personal resources have also been included, either as predictors, mediators, or moderators.

Self-efficacy is often included as a *predictor* in studies on the adoption of technological innovations (e.g., Lam, Cho, & Qu, 2007). For example, Hill, Smith, and Mann (1987) showed the importance of efficacy beliefs in the decision to adopt an innovation. They demonstrated the impact of computer self-efficacy on adoption, independent of the beliefs relating to the instrumental value of doing so. It has been

argued that self-efficacy is crucial for adaptive behavior and performance. If employees lack confidence regarding new behaviors they are unlikely to try these out (Griffin & Hesketh, 2003). Wanberg and Banas (2000) found that change-related self-efficacy, self esteem, optimism and a sense of control predicted openness to change, while openness predicted outcomes such as job satisfaction, irritation and turnover intentions. Ashford (1988) found that people with high self-esteem were better at coping with stress during organizational change than people low on self-esteem. Campbell (2006) showed that employees with a high learning orientation were more positive and proactive towards change than employees with a low learning orientation. Holt et al. (2007) used change efficacy in their model for individual readiness for change. Change-related efficacy was found to partially mediate the relationship between change-related information and well-being. Furthermore, self-efficacy was found to buffer stress during the change process (Jimmieson, Terry, & Callan, 2004).

It has been suggested that promotion focus is associated with more engagement in change-related behaviors than prevention focus (Dewett & Denisi, 2007). Also, Liberman, Idson, Camacho, and Higgins (1999) found that promotion-focused individuals showed more openness to change than individuals with a prevention focus. Avey, Wernsing, and Luthans (2008) found that the predictive value of PsyCap on change attitudes was mediated by positive emotions. Mindfulness had a moderating role and was found to compensate for low PsyCap. Stark, Thomas, and Poppler (2000) found that self-esteem moderated the effects of organizational change on job satisfaction. Employees with high self-esteem reported higher job satisfaction than those with low self-esteem. Personal resources have also been studied as mediators in organizational change settings. For example, Martin, Jones, and Callan (2005) found a relationship between psychological climate and adjustment indicators (well-being, job satisfaction, commitment, absenteeism, and turnover intention). This relationship was mediated by change-efficacy, control, and change-related stress. Frayne and Geringer (2000) found that self-efficacy partially mediated the relationship between self-management training, outcome expectancies, and job performance.

Employee Attitudes to Organizational Change

Attitudes to specific behaviors have been shown to have predictive value for behavior (Petty & Cacioppo, 1981). Many organizational change studies include attitudinal constructs such as resistance or willingness to change (e.g. Metselaar, 1997; Rafferty & Griffin, 2006; Van Dam, Oreg, & Schyns, 2007). One of the earliest influential studies dealing with employees' resistance to change was that of Coch and French (1948), which showed the positive impact of employee participation on reducing employee resistance to change. More recently, studies have also included positive attitudes, such as willingness and readiness for change (Armenakis et al., 1993; Piderit, 2000). Readiness for change is defined as employees' beliefs, attitudes

and intentions regarding the necessity and the chance of successful implementation of organizational change. It is seen as the cognitive precursor to resistant or supporting behaviors in relation to the change. Willingness to change refers to a positive behavioral intention towards the implementation of change in the structure, culture, or work processes of an organization, resulting in efforts to support or enhance the change process (Metselaar, 1997). Other constructs that focus on positive attitudes and beliefs include commitment to change (Herscovitch & Meyer, 2002) and openness to change (e.g., Miller, Johnson, & Grau, 1994). In our approach we include the relationship and interaction between change attitudes and personal resources. Furthermore, we include attitudes not as outcomes but as driving forces predicting actual behaviors towards the change.

Dealing with Organizational Change: Strategies

What do employees actually do in terms of interacting with the change, managing themselves and their working environment? Organizational change impacts the work environment which, in turn, demands a response from the employee. Employees make an effort to maintain the fit between their abilities and the external demands of the environment. These strategies range from those aimed at regulating the external environment to those regulating intrapersonal processes. Reactive responses have been described as those efforts where employees try to change themselves in order to manage changing demands. Active or proactive responses are those strategies that entail employees initiating behaviors that positively impact their working environment and restore the fit (Griffin & Hesketh, 2003).

Strategies to cope

Coping can be defined as the conscious cognitive and behavioral efforts to manage the internal and external demands of situations that are appraised as stressful (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). Coping strategies can be problem-focused; aimed at eliminating the stressor, or emotion-focused; aimed at managing emotional responses. Aspinwall and Taylor (1992) showed that the impact of psychological control and self-esteem on adjustment and performance was mediated by specific forms of active, problem-focused coping. In organizational change research, support has been found for the mediating role of coping strategies in the relationship between personal resources and positive employee outcomes (Callan, 1993; Judge et al., 1999). Main effects of coping strategies on well-being have also been found, irrespective of the level of stress (Callan et al., 1994). Recently, researchers have suggested a move away from the broad distinction of problem-focused vs. emotion-focused coping (Connor-Smith & Flachsbart, 2007; Skinner, Edge, Altman, & Sherwood, 2003). A focus is needed on more specific coping strategies and personality facets. In line with the person-situation perspective, it is important to view coping as an ongoing, *interactive* process between employees and their

working environment (Briner, Harris, & Daniels, 2004). Our approach provides scope to do this and it may provide insights concerning the specific relationships between different personal resources and specific strategies they predict. Strategies represent the measurable behaviors employees engage in. We differentiate strategies to manage the external change environment (job crafting and active coping) versus strategies to manage oneself (self-regulation and self-leadership).

Job crafting and self-leadership

Self-regulation is a broad term that illustrates the evolving focus on employees as "purposeful, goal-striving individuals" (Vancouver & Day, 2005, p.156). The idea of behavioral self-regulation refers to a mechanism that monitors progress towards desired states or goals. When a discrepancy is detected, an effort is made to change behavior in order to reduce the discrepancy and move towards desired end states (Carver & Scheier, 1981, 1998). There is no consensus on a uniform definition of self-regulation. It has been broadly defined as "the processes involved in attaining and maintaining internally represented desired states" (goals) (Vancouver & Day, 2005, p.158). Goal establishment, planning, striving and revision have been identified as key components of self-regulation processes. Where coping is a reactive process to a demanding, stressful situation, self-regulation processes view employees as goal-oriented, active agents. Individuals who are resourceful in terms of being confident and hopeful were found to persist when faced with obstacles in attaining their goals, as opposed to disengaging or searching for alternative goals (Carver & Scheier, 1998). Employees are not mere products of their environment, but actively sculpt their environments (Bell & Staw, 1989). This notion is part of both job-crafting theory and self-leadership theory.

Job Crafting is defined as "the physical and cognitive changes individuals make in the task or relational boundaries of their work" (Wrzesniewski & Dutton, 2001, p. 179). The concept of job crafting recognizes that employees are continuously interacting with their environments, regardless of their hierarchical position within an organization. Different types of crafting have been identified; firstly employees can change the number, scope and type of job tasks. Secondly, employees can craft the quality and the amount of social encounters with other people encountered at work. Thirdly, cognitive task boundaries can be changed, by thinking differently about which tasks are and aren't part of the role, and how these fit together (Wrzesniewski & Dutton, 2001). In a change situation these dynamic processes are likely to be even more salient.

Self-leadership was introduced as an expansion on the concept of self-management, which refers to the degree to which an employee takes responsibility for the managerial aspects of his or her job over and above the content and production-related responsibilities (Manz & Sims, 1980; Markham & Markham, 1995). Self-leadership emphasizes intrinsic work motivation and rewards. It is related to job resources such as autonomy, in that it allows employees to influence how a task is carried out. Self-leadership focuses on *what* to do and *why* (goal selection and setting), and also *how* to attain these goals. Self-leadership is defined as "a process through which individuals

control their own behavior, influencing and leading themselves through the use of specific sets of behavioral and cognitive strategies" (Neck & Houghton, 2006, p.270). The main components of self-leadership include behavior-focused strategies (i.e., self-observation, self-goal-setting, self-reward, self-punishment), and self-cueing (i.e., reminding oneself of important goals). Secondly, natural reward strategies that focus on building intrinsically pleasurable or motivating aspects into a task or working environment. These strategies can range from changing lighting or decoration at work to focusing on particular enjoyable aspects of a job. The theory suggests that these strategies will lead to feelings of self-control, purpose and increased performance (Houghton & Neck, 2002). Thirdly, constructive thought patterns pertain to "the creation and maintenance of functional patterns of habitual thinking" (Houghton & Neck, 2002, p. 674). These strategies lean on theories from therapeutic settings such as rational emotive therapy (Ellis, 1977) and are nowadays widely used in interventions outside clinical contexts such as in coaching, which is also focused on facilitating self-regulation behaviors (self-observation, self-management, goal-setting) (e.g., Costa & Garmston, 2002; Wasylyshyn, 2003). A positive relationship was found between personal resources and the use of self-leadership strategies (Norris, 2008). We expect personal resources to positively influence employees' use of self-leadership strategies in order to work productively while having positive work experiences. Since self-leadership is presented as a normative theory, these strategies may be particularly relevant for intervention studies in change research.

Outcomes: Adaptive Performance and Work Engagement during Change

Although many studies focus on attitudes to change as outcomes, there seem to be fewer studies that include both individual characteristics and behavioral outcomes in terms of adaptive performance. In our model we propose that personal resources can boost work engagement and adaptive performance during change processes in organizations. We expect this process to be partially mediated by change attitudes and behavioral strategies. Below, outcome variables included in our model are described.

Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Vigor refers to high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence in the face of difficulties. Dedication refers to a sense of significance, enthusiasm, inspiration, pride, and challenge. The third dimension of engagement is absorption, or flow, and is characterized by being fully concentrated and happily engrossed in one's work, so that time passes quickly and one has difficulties with detaching from work. Job and personal resources are found to be the main predictors of engagement; these resources gain their salience in the context of high job demands (Bakker, Demerouti, & Verbeke, 2004). Engaged workers are more creative, more productive, and more willing to go the extra mile. Work engagement has been

shown to be contagious and may therefore be of special importance during change, as a counterforce for possible change-cynicism.

Employees typically engage in in-role and extra-role performance. In-role or task performance is defined as those officially required outcomes and behaviors that directly serve the goals of the organization (Motowidlo & Van Scotter, 1994). In-role performance includes meeting organizational objectives and effective functioning (Behrman & Perreault, 1984). Extra-role or contextual performance is defined as employees' discretionary behaviors that are believed to directly promote the effective functioning of an organization, without necessarily directly influencing a person's target productivity (Podsakoff & MacKenzie, 1994). Examples include willingness to help colleagues who have heavy workloads or the avoidance of problems with colleagues (this is also known as a specific form of organizational citizenship behavior; Organ & Paine, 1999). According to Dewett and Denisi (2007), a specific form of extra-role performance is change-related citizenship behavior. This refers to the expression of constructive challenge intended to improve rather than undermine the functioning of an organization undergoing change.

In our model we use *adaptive performance* as an outcome variable that expresses the change content. Since our level of analysis is the employee, the content of organizational change can be anything from cultural change to implementation of new software, as long as it affects the way in which people are required to behave at work. We define adaptive performance as work behaviors related to the new way of working, which is part of the organizational change. Adaptive performance can be understood as in-role performance in a change context. Pulakos, Arad, Donovan, and Plamondon (2000) developed an eight-dimension behavioral taxonomy for adaptive performance, including such aspects as learning new tasks, technologies and procedures, handling work stress, demonstrating interpersonal adaptability and creative problem solving. Our approach to adaptive performance is different from this and other general conceptualizations (e.g., Griffin & Hesketh, 2003) in that we view adaptive performance as a specific measure of change-related behavior. Ideally this should be captured both by self-assessment and other ratings. The measure is specified based on the specific change content. For example, when the change is related to multidisciplinary team-working, a measure is used that specifies team-working behaviors. Examples include discussing project progress with the team, designing methods as a team, and soliciting feedback from the team. Employees are consequently asked how often they engage in these behaviors. This type of measure allows us to capture behavior change and, thus, employee adaptive performance.

Personal Resources Adaptation Model

As argued above, when it comes to understanding adaptation to organizational change, employees' personal resources are relevant factors. Our model (Figure 7.2) departs from the assumption that organizational change will result in changes in the work environment. For example, employees may be confronted with increased
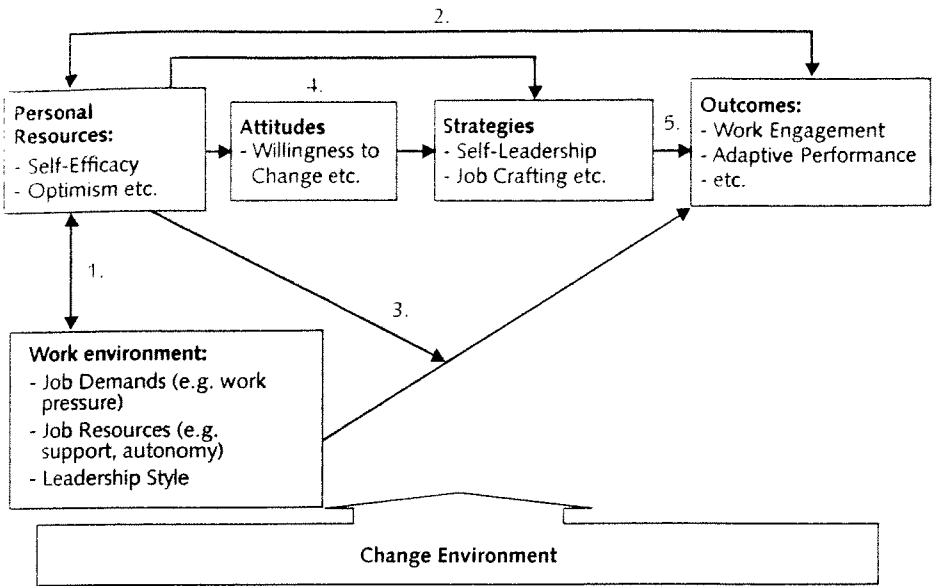
Figure 7.2 Personal Resources Adaptation Model

demands (e.g., more time pressure, higher workload, etc.) and more ambiguous operating environments (Armenakis & Bedeian, 1999; Campbell, 2006). People are expected to show new behaviors, process new information, and/or utilize new equipment during change (Armenakis & Bedeian, 1999). At the same time, the change may positively impact job resources, for example by increasing efficiency, facilitating communication, or possibilities for learning. The example of a Dutch regional college illustrates this. Teachers were confronted with a new policy that required them to change their didactic approach in order to help students to develop their talents. This resulted in having to use new materials and having to coach students, which was far-removed from more traditional methods of transferring knowledge. As a result of this change, teachers were exposed to higher cognitive demands, but they may have also perceived more task variety. Below we discuss the relationships represented in the "Personal resources adaptation model" (Figure 7.2.)

Personal resources and the work environment: Reciprocal influences

The model suggests a reciprocal relationship between employees' personal resources and job demands/resources. In line with the work of Kohn and Schooler (1982), we expect that personal resources will influence job demands/resources. This is also in line with the suggestions of Zapf, Dormann, and Frese (1996) regarding reversed causal effects of well-being on (perceived) working conditions and the drift hypothesis (people in a bad state drift to worse jobs). Employees with more personal resources will create job resources for themselves. For example, Scheier, Weintraub,

and Carver (1986) found that people high in optimism were more likely to seek and receive social support. This may be influenced by employees' self-regulation strategies. Personal resources may also influence perceptions of the changed work environment. Resilient employees are more likely to perceive a new requirement as a challenge, while less resilient employees will experience changed requirements as taxing demands (Maddi, 2005).

Secondly, we expect job demands/resources in the working environment to influence the presence of personal resources. Many studies have established that job demands and job resources can impact employee health and well-being (e.g., Bakker & Demerouti, 2008; Hackman & Oldham, 1980; Karasek, 1979; Schaufeli & Salanova, 2007). We expect that job resources (e.g., support) may enhance the presence of personal resources (e.g., self-efficacy). These relationships should be tested in a longitudinal design.

Personal resources as mediators in the relationship between work environment and outcomes

The model suggests that personal resources may act both as mediators and moderators in explaining the relationship between the work environment and outcomes (i.e., work engagement and adaptive performance) while direct effects can also be observed.

A *direct* positive effect of personal resources on work engagement and performance is expected. Aspinwall and Taylor (1992) found that optimism had a direct effect on college adjustment. This direct effect can work for other personal resources as well. For example, self-efficacy makes employees feel competent, confident, and motivated. Self-efficacious employees therefore experience more engagement towards their work and eventually perform better (Xanthopoulou et al., 2009a).

In addition to this, we expect personal resources to *mediate* the influence of changes in the work environment on work engagement and performance. The model proposes that job resources (e.g., support, autonomy) will influence and build personal resources, which in turn will have a direct favorable impact on work engagement and performance. This process was observed in a study by Xanthopoulou et al. (2008), which showed that support enhanced self-efficacy which consequently increased work engagement. This mediated relationship between work environment, personal resources and positive organizational outcomes, has also been shown for organizational-based self-esteem (Pierce & Gardner, 2004) and PsyCap (Luthans et al., 2006).

Reciprocal relations between personal resources and outcomes

We expect that over time there will be a beneficial impact of work-engagement and adaptive performance on personal resources. This is in line with the broaden-and-build theory, that outlines how the presence of positive emotions triggers an upward spiral towards broadminded coping (i.e., taking a broad perspective and finding

positive meaning), which in turn leads to more positive affect (Fredrickson & Joiner, 2002). In our model this would mean that positive emotions that accompany work engagement and performance can build enduring personal resources.

Personal resources as moderators

The model also suggests that personal resources will moderate the influence of job resources on performance and engagement. Personal resources can form a buffer against the adverse impact of job demands. This has been shown in a study where self-efficacy moderated the relationship between job demands and psychological health outcomes (Van Yperen & Snijders, 2000). This effect has also been shown for job resources, which buffered the negative impact of job demands on work engagement (Bakker et al., 2007). In addition, we expect that personal resources will enhance the positive impact of job resources on well-being and performance. We expect more resourceful employees to be more motivated and better able to spot resources in the changing environment and use them to their advantage, resulting in improved performance and engagement.

Role of Change Attitudes and Strategies

Most studies in this area have focused on the impact of change context variables (e.g., communication, participation, and trust) on attitudes to change (e.g., Kotter & Schlesinger, 1979). We focus on the presence of personal resources and how this influences attitudes to change. We expect the presence of more resources to lead to a more positive change attitude. In turn, change attitudes will influence employees' choice of strategies for interacting with the change.

The model suggests that personal resources are translated into (cognitive) behavioral strategies. For example, self-efficacy beliefs are linked to a strategy of remembering previous mastery experiences and using these in evaluating one's current capacities to deal with a situation (Bandura, 1997). Maddi (2005) studied responses to radical organizational change and found that resilient employees used more adaptive behavioral and cognitive strategies than less resilient employees. They were more proactive in initiating support and were able to change their thinking on the situation, which allowed them to develop more understanding and more effective plans. Similar dynamic processes are described in Aldwin et al.'s (1996) Deviation Amplification Model, which suggests that high base-levels of general personal resources lead to more adaptive coping strategies, which lead to high situational and personal resources and ultimately this builds up general levels of personal resources. This idea of a positive gain spiral has also been applied to the workplace (e.g., Llorens, Schaufeli, Bakker, & Salanova, 2007; Xanthopoulou et al., 2009a). In spite of the fact that it may be the practical ways of using and creating resources that will promote well-being and engagement in times of change, strategies haven't been studied widely in this process as of yet.

In our view it is useful to include personal resources separately, as opposed to combining them into a higher-order construct (such as PsyCap). Being able to distinguish between the impact of different personal resources will inform the design of targeted interventions.

We expect strategies used to deal with a changing environment will predict work engagement and adaptive performance. Problem-focused strategies were shown to predict higher levels of job satisfaction during a merger (Amiot, Terry, Jimmieson, & Callan, 2006). Also, self-leadership strategies were shown to be related to innovative behaviours at work (Carmeli, Meitar, & Weisberg, 2006).

Conclusion

The aim of this chapter was to outline why it is relevant to include the role of the person in studies on organizational change. Change has become a constant and may form a risk factor for employee health and well-being (Saksvik et al., 2007). Healthy organizational change requires both the creation of positive working conditions and the development of employee personal resources and strategies such as self-efficacy, optimism and self-leadership, which in turn may positively influence organizational change-ability. Our model proposes that employees are active agents who shape their environment using behavioral strategies, influenced by personal resources and change attitudes. These employee-level processes influence positive employee outcomes, i.e., work engagement and adaptive performance. This type of research will inform the design of employee-level change interventions. Behavior change at this level is often the missing link in large-scale change interventions. Research in this area will help organizations to balance top-down with bottom-up initiatives to facilitate positive change.

Practical implications

This chapter emphasizes the need for organizations and managers to be aware of individual differences in employee personal resourcefulness. Besides the widely known steps involving communication, participation and skills training, it is important to be aware that employees are resourceful, active agents who do not generally think of themselves as resisting. Managers should focus on bringing self-managing behaviors to the fore, helping employees to see the positive sides of the change, giving support to less self-efficacious employees, etc. Employees should be encouraged to find meaning in the change. This could be achieved by discussing how the changes will affect personal and work-related goals, and how to best manage this impact. Being open to negative change attitudes and actively leveraging positive attitudes is important in monitoring progress. Negative attitudes may hold important information, and it has been suggested that resistance can be a sign of commitment. Soliciting feedback on the change content and process is important. Methods such as appreciative enquiry may be used to involve all employees in a positive change effort

(Cooperrider & Sekerka, 2003). Employers might consider training their managers to develop coaching leadership styles that support and encourage employees' self-leadership strategies. Employees and managers could jointly map the working environment in terms of job demands/resources, including both the physical and psychosocial working environment (support, task variety, etc.). Finally, it is important for managers to be aware of their own personal resources, attitudes and strategies, and how these may impact their leadership behaviors.

Future research

In order to develop practical interventions, research should focus on further investigating the development process of personal resources over time, and the role of traits, self-awareness, and other relevant variables. Also, research might focus on which behavioral strategies are most conducive to adaptive performance (taking into account moderation effects, i.e., which strategies are most suitable for which employees). Another topic relevant during organizational transitions is the positive gain spiral or learning cycle in which general levels of personal resources are built, based on successful strategies, mastery experiences, and performance. Also, the interaction between leaders' and followers' personal resources, attitudes and strategies, and the impact of this interplay on successful adaptation would be interesting for future organizational change research. This could result in practical guidelines to facilitate the adoption of new work practices. Multiple measurement methods, like quantitative diary studies, can make these micro-processes more transparent by examining how they unfold on a daily or weekly level.

Final note

Managing change will always be a challenging, dynamic process where different perspectives at different levels need to be taken into account. We have argued here that an individual-level focus ought to be a crucial element in any change process, since transitions to new ways of working are nearly always accompanied by ambiguity and uncertainty. Besides the obvious aspects of knowledge and skills training, employees' personal resources, attitudes, and strategies can and should be actively managed to facilitate adaptive performance and work engagement. Organizational change cannot be successful without individual change, and individual change requires personal resourcefulness.

Acknowledgement

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