Self-Endangering Work Behavior

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Abstract

Confronted with progressively increasing demands for greater flexibility, organizations apply organizational and managerial practices that build on their employees' self-organization and self-discipline, thereby increasing their employees' control over achieving their everyday work tasks. Although these practices offer opportunities for personal growth and coordination of work and private life, the resultant demands for increasing autonomy and self-organization may overtax employees' capacities, leading to stress. Furthermore, employees are increasingly reacting in ways that are self-exploitative and detrimental to their own health in response to large work-loads and strong demands for selforganization. This chapter introduces the concept of self-endangering work behavior; namely, behaviors that may be functional with regard to attaining work goals but dysfunctional with regard to health and long-term ability to work. We propose that self-endangering work behavior can be viewed as a form of coping reaction when workers are confronted with large work-loads and strong demands for self-organization. Based on the transactional stress model and regulation of behavior theory, we propose that self-endangering work behavior may mediate the effect of large work-loads and strong demands for self-organization on impaired well-being. We summarize empirical findings that confirm

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the detrimental role of self-endangering behaviors and their capacity to increase the detrimental effects of work demands. Finally, we discuss the benefit of assessing self-endangering behavior with the aim of taking preventive measures.

1 Introduction

Since the late 1980s, organizations and workers in industrialized economies have been confronted with progressively increasing demands for greater flexibility. This has changed the nature of work and employment and the quality of working life in general (Allvin et al. 2011; Felstead and Jewson 1999; Näswall et al. 2008). Flexible forms of work such as telework, flexible work times, and mobile work are becoming increasingly prevalent. It has even been proposed that they are indicators of how modern organizations aim to increase their employees' productivity and work engagement (de Menezes and Kelliher 2011; Posthuma et al. 2013). These changes impact not only on organizational structures and practices but also on the working conditions and everyday lives of employees in general (e.g., Felstead and Jewson 1999; Rousseau 1997).

There are conflicting assumptions about the health-related effects of the development of flexible forms of work (e.g., Badura et al. 2012). On the one hand, there is evidence that new, flexible, and more autonomous forms of work potentially have positive effects on well-being and can promote a good fit between work and private life (Allen et al. 2013; Gajendran and Harrison 2007; Joyce et al. 2010; Pfeiffer 2012; Zok and Dammasch 2012). On the other hand, scholars who base their views on sociological approaches such as the concepts of boundarylessness and subjectivization (Moldaschl and Voss 2003) are arguing that the increasing demands for flexibility and self-management (Graf 2012) accompanying these developments may place employees at risk. Höge and Hornung (2013) reported that demands for flexibility, including the requirement for employees to structure their own work procedures, are accompanied by increased emotional and cognitive irritation. Other studies have revealed links between flexible-autonomous work and perceived stress, feelings of time pressure (Ducki 2009), reduced sleep quality, and psychosomatic complaints (Janssen and Nachreiner 2004). However, evidence of the negative effects of increasing demands for flexibility is inconsistent. It can be assumed that the way requirements for increasing flexibility and self-management relate to health-related outcomes is affected by the specific behaviors employees use to cope with these demands and the consequences these behaviors have for their health and well-being (Kaur et al. 2010).

In this chapter, we will discuss a specific way in which employees react when confronted with flexible work requirements that may explain the negative effects of flexible and autonomous forms of work on well-being. This reaction, which can be termed *self-endangering work behavior*, includes discrete employee behaviors that assist in coping with excessive demands at work in the short term but have negative adverse effects on health and well-being in the long term. We will conceptualize

such behavior in the context of coping behavior and contrast it with existing constructs such as work engagement, overcommitment, and workaholism. Furthermore, we will discuss the specific effects of such behavior on health and well-being.

2 Self-Endangering Work Behavior as a Reaction to Demands for Flexibility

Confronted with new demands for flexibility and continuous change, organizations are increasingly moving away from traditional Tayloristic ways of controlling transformation of employees' latent working capacities into performance (Höge 2011). New managerial practices build on employees' self-organization and selfdiscipline. Organizational strategies such as reducing hierarchy levels, a matrix structure, and management by objectives increase employees' control over achieving their everyday work goals. Within these forms of work organization not only managers but also employees have to make decisions about how, when, and where to work and how to increase their own efficiency (Garhammer 2002; Höge 2011). Whereas the major aims of these new forms of management are to rationalize work and increase its productivity and flexibility, they also include key criteria of traditional human-oriented work design approaches; namely, provision of autonomy and latitude in decision-making (e.g. Hackman and Oldham 1976; Karasek 1979). Indeed, providing more responsibility and flexibility and encouraging workers' creativity and engagement offer opportunities for personal growth, learning, and coordination of work and life (Oldham and Hackman 2010). However, increasing autonomy and demands for self-organization can also be associated with additional effort that may overtax employees' capacities and lead to stress (Höge 2011; Voss and Pongratz 1998). In addition, such approaches allow employees discretion regarding both their work procedures and coping behaviors when confronted with high or overtaxing work demands. This may lead to new forms of coping reactions that can increase the risks of detrimental effects on employee health (Kaur et al. 2010). The specific choices of coping behaviors become more important.

Performance and goal-oriented work systems can be considered *indirect* leadership systems. Based on the theory of goal setting (Locke and Latham 2002), indirect leadership systems such as management by objectives aim to get employees to identify with organizational goals. Employees are encouraged to act as entrepreneurs ("entreployees", Voss and Pongratz 1998) and to orient their performance toward benchmarks and key performance indicators. Employees' engagement with attaining goals and avoiding failure is no longer controlled by external rewards or direct punishment but by personal interest in meeting these key performance indicators. Failing to meet work goals then translates into personal insufficiency (Peters 2011). As a consequence, employees will continue to strive for their work goals even when these goals cannot be reached with the given resources and capacities.

Against this background, employees are increasingly behaving in selfexploitative ways that are detrimental to their health (Docherty et al. 2002; Kieschke and Schaarschmidt 2008). In numerous case studies, Krause et al. (2012) have identified behavioral strategies used by employees to cope with increased requirements for flexibility and high work demands. On the one hand, these behaviors are functional in terms of dealing with stressful work situations and achieving work goals, thereby promoting self-esteem, motivation, and satisfaction. On the other, they have disadvantages regarding health and recovery. Accordingly, we have named these coping behaviors self-endangering work behavior (Krause et al. 2012). Self-endangering work behavior is characterized by actions that aim to deal with work-related demands but simultaneously increase the likelihood of health problems and impede necessary recovery from work-related stress. Examples of behaviors aimed at attaining internalized but potentially overtaxing work goals are extending work time, not taking time to recover, work intensification and sick presenteeism (Baeriswyl 2014; Semmer et al. 2010). Other behaviors involve taking risks to reach goals with less effort, for example by skipping security regulations and therefore risking adverse effects.

A range of case studies have revealed a variety of behaviors that can be considered self-endangering (Krause et al. 2012). Building on experiences gained in several health promotion projects and investigating employees working in flexible work systems, Krause et al. (2014) have systematically explored different forms of behavior that have the aim of coping with high work demands and the potential to harm individual health. They have identified the following eight types of behavior: (1) extension of work time and not taking time to recover; (2) work intensification; (3) sickness presenteeism; (4) abuse of stimulants in an attempt to optimize internal states; (5) abuse of sedative substance to facilitate relaxation; (6) reducing quality of work; (7) failure to comply with security regulations; and (8) faking.

Extension of work time and not taking time to recover means reducing private and family time and recovery periods in general in favor of work time. In Krause et al.'s 2012 study, employees reported different forms of extending work time when confronted with high work demands. These included not only long working hours and working overtime but also extending availability for work during off-job time (Dettmers and Bamberg 2013; Pangert and Schüpbach 2013). These findings closely match trends observed in national and international representative surveys (e.g., Eurofound 2012). One Swiss survey revealed that 20% of Swiss employees work at least once a week during off-job time (Krieger et al. 2012) and 12% work more than 10 h a day at least six times a month. These behaviors are reportedly associated with perceived stress, increased burnout levels, and health-related problems (Grebner et al. 2010; see also Wirtz 2010).

Another frequently reported behavior is *work intensification*. This means working at an increased pace and multitasking along with refraining from both work breaks and social interactions at work (Korunka and Kubicek 2013). There has been a great deal of research under the heading of *work intensification* (also referred to as intensification of work; e.g., Green 2004), particularly in the medical care context

(e.g., Horner et al. 2012). Empirical findings suggest that work intensification can have positive consequences such as feelings of capability or delight (similar to consequences of challenge stressors, e.g., Widmer et al. 2012) or negative consequences such as impaired health (Korunka and Kubicek 2013). Another adverse side effect is that employees report less communication and social support. Rau (2012) warns that permanently intensifying work may lead to continuous activation even after leaving work, reducing sleep quality and increasing the risk of cardiovascular diseases.

Sick presenteeism means going to work when sick. Various studies have investigated this (e.g., Aronsson et al. 2000; Hägerbäumer 2011). The specific conditions found in flexible, goal-oriented leadership systems with high work demands promote this kind of behavior (Aronsson and Gustafsson 2005; Böckerman and Laukkanen 2009, 2010; Caverley et al. 2007; Claes 2011; Deery et al. 2014; Hägerbäumer 2011; Hansen and Andersen 2008; Heponiemi et al. 2010; Johns 2011). Employees report that their work will not get done while they are on sick leave and will therefore have accumulated when they return to work. Grebner et al. (2010) have shown that almost every second working person in Switzerland reports having gone to work when sick. The harmful effects of sickness presenteeism for employees and organizations are well documented. Sickness presenteeism is a predictor of different indicators of poor health (e.g., Bergström et al. 2009; Conway et al. 2014; Kivimäki et al. 2005) and future sickness absence (Bergström et al. 2009; Janssens et al. 2013). Sickness presenteeism has repeatedly been shown to be positively associated with emotional exhaustion (Demerouti et al. 2009; Hägerbäumer 2011; Lu et al. 2013a, b).

The above practices (also reported by Baeriswyl 2014) are not the only self-endangering behavior used by employees. For example, they actively try to modify internal states to cope better with high work demands (Krause et al. 2012). This may include *consuming substances to enhance their performance*. Employees report consuming caffeine and other stimulants. This so-called brain doping or neuro-enhancement may include taking pharmaceutical stimulants such as methylphenidate and even illegal amphetamines or cocaine. In one study in Germany, 1.5% of employees and 5% of university students admitted taking neuro-enhancers (Kowalski 2013). Given that such behavior is viewed negatively, it can be assumed that the actual number of employees taking drugs to cope with increasing demands is even higher. In addition, Krause et al. (2014) mention *substance abuse for recovery purposes*. Both types of substance-taking behavior aim to increase or restore the capacity to perform to cope with potentially overtaxing work demands.

Another type of self-endangering behavior designed to cope with high demands is *risky behavior and failure to comply with safety regulations* in reaction to time pressure (Leitner et al. 1987; Mearns and Hope 2005). Other potential reactions to excessive work demands include general *reduction of quality* (Welsh and Ordóñez 2014) and *faking* behavior (Krause et al. 2014). These may well have long-term negative effects on employees' work-related self-esteem and job security.

In summary, we see self-endangering work behavior as behaviors that employees deliberately implement when confronted with high work demands.

These behaviors aim at coping with the demands but are associated with detrimental effects. Thus, self-endangering work behaviors may increase negative outcomes of high work demands. We assume that autonomous and flexible forms of work in particular enforce this type of behavior. After adopting organizational work goals as their own personal goals, employees select behaviors for reaching these goals, even when they are unattainable with the given resources. In so doing, they intensify their work pace, do not take time to recover and manipulate their internal states to perform. Success in fulfilling their work goals may have the positive consequence of a boost in self-esteem (Widmer et al. 2012) or at least the satisfaction of not having failed to reach the goal (Peters 2011). However, this kind of behavior is not sustainable in the long run. Negative long-term effects on health and well-being are inevitable. Hence, self-endangering behavior can be considered a mediating mechanism between excessive work demands and negative effects on health and well-being (Baeriswyl 2014).

3 Self-Endangering Work Behavior and Coping

Self-endangering work-related behavior is not the only possible reaction to high or overtaxing work demands. Coping research (e.g., Carver and Scheier 1998; Lazarus and Folkman 1984) emphasizes the relevance of cognitive, emotional, and behavioral reactions to work demands. Transactional stress theory defines coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus and Folkman 1984, p. 141). The cognitive, emotional, or behavioral reaction to a stressor is a crucial determinant of the actual effect of that stressor on an individual. In this sense, coping reactions mediate the effect of stressors on well-being (Lazarus and Folkman 1984). Stress and coping theories such as Carver and Scheier's (1998) theory on the self-regulation of behavior demonstrate that both the stress caused by work demands (such as high workload) and the ways in which individuals deal with these demands contribute to the genesis of short- and long-term mental and physical illnesses (see also Bamberg et al. 2003; Greif et al. 1991; Lohmann-Haislah 2012; Mearns and Cain 2003; Zapf and Semmer 2004). The specific nature of individual coping reactions to stress determines whether those individuals stay healthy or become ill (Gutiérrez Doña 2002). There are many ways of categorizing coping (Carver and Connor-Smith 2010); Lazarus and Folkman (1984) identify two specific coping types: problemfocused coping and emotion-focused coping. A large proportion of the emotionfocused coping types are cognitive processes such as "distancing," "positive comparisons," or "avoidance", the main goal of which is to reduce emotional distress (Carver and Scheier 1998; Carver et al. 1989; Lazarus and Folkman 1984). In contrast, problem-focused coping comprises behaviors and ways of thinking that aim to solve a current problem or remove a given stressor. Strategies in this category include modifications of the environment and cognitive and motivational changes ("inward-directed strategies"). In addition, a relevant distinction is often made between active coping (engagement coping, approach coping) and avoidance coping (disengagement coping) (Billings and Moos 1981; Carver and Connor-Smith 2010; Carver and Scheier 1998; Carver et al. 1989; Nielsen and Knardahl 2014). The former refers to dynamic efforts to manage the situational stressor and emerging aversive emotions (Carver and Connor-Smith 2010). In their theory on the self-regulation of behavior, Carver and Scheier (1998) establish a link between active coping and goal achievement. Active coping can be seen as "continued engagement with goals that the stressor is threatening" (Carver and Scheier 1998, p. 214). This implies attempts to maintain a set goal. It includes both problem- and emotion-focused strategies, for instance seeking support, planning, problem solving, and cognitive restructuring. In contrast, avoidance or disengagement coping aims to prevent additional confrontations with the stressor and is associated negative feelings by abandoning the goal. Most of these types of coping are emotion-focused. Examples are denial, behavioral disengagement, and wishful thinking.

There is empirical evidence that avoidance coping has negative effects on health and well-being (Evans et al. 2004; Nielsen and Knardahl 2014; Wallace et al. 2010). This is mainly because this coping type "does nothing about the threat's existence and its eventual impact" (Carver and Connor-Smith 2010, p. 686). In contrast, active coping strategies can be positively associated with well-being (Nielsen and Knardahl 2014; Wallace et al. 2010). For example, Nielsen and Knardahl (2014) have shown that engagement coping correlates negatively with impaired well-being. Active coping also buffers the effect of workload on burnout (Wallace et al. 2010). Furthermore, problem solving, cognitive restructuring, and seeking advice are positively related to job satisfaction and work engagement (Rothmann et al. 2011; Welbourne et al. 2007).

If self-endangering work behavior as an active behavioral reaction to excessive work demands is integrated into the theoretical coping framework, self-endangering work behavior can be considered a form of active coping: When confronted with high work demands, employees try to achieve the given work goal and do not abandon it despite being faced with hindrances and having insufficient resources. This is characteristic of active coping (Carver et al. 1989; Semmer and Meier 2009). With respect to health-related outcomes, however, the focus on goal attainment is disadvantageous: whereas self-endangering work behavior is directed toward goal attainment and may even succeed in achieving that, this success is built on detrimental behaviors that may impair well-being and health. Furthermore, when self-endangering work behaviors are employed to achieve potentially overtaxing work goals, these overtaxing goals become stabilized and legitimized within the organization, creating a permanent stressor of overload. Thus, self-endangering work behaviors do not contribute to reducing stressors, as would be expected for problem-focused coping.

In summary, self-endangering work behavior can be seen as a coping reaction to high work demands. Because self-endangering work behavior includes retaining work goals, it can be considered a form of active coping. However, rather than buffering the effects of demands and reducing stressors, self-endangering work

behavior has predictable detrimental effects on well-being. We believe that, because self-endangering behavior goes beyond the traditional distinction between active and avoidance coping, it has an incremental value for explaining the effects of stressors on health and well-being (Dettmers and Deci 2014).

4 Self-Endangering Work Behavior, Work Engagement, Workaholism, and Overcommitment

As far as the principle of excessive work behavior is concerned, the concept of self-endangering work behavior may resemble other established constructs about organizational behavior such as work engagement (Schaufeli et al. 2002), workaholism (Schaufeli et al. 2008), and overcommitment (Siegrist et al. 2004). However, there are significant differences between these phenomena.

Compared with *work engagement*, different psychological levels are in focus. Whereas self-endangering work behavior is a specific observable behavior, work engagement is conceptualized as a psychological state of mind. Schaufeli et al. (2002, p. 74) define work engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption." Moreover, according to the job demands—resources model (Bakker and Demerouti 2007), work engagement is part of the motivational process. Engaged employees enjoy working and this leads to positive outcomes (Schaufeli et al. 2008). In contrast, self-endangering work behavior potentially impairs health (Baeriswyl et al. 2014). Baeriswyl et al. (2014) have demonstrated that the self-endangering work behavior of sick presenteeism mediates the relationship between job stressors and burnout. Thus, compared with work engagement, self-endangering behaviors concerns different phenomial levels (behavior vs. psychological state) and processes (health impairment vs. motivational process).

The core of the concept of *workaholism* is an inner drive to work (Schaufeli et al. 2008). Workaholics "work so hard out of an inner compulsion, need, or drive, and not because of external factors such as financial rewards, career perspectives, organizational culture, or poor marriage" (Schaufeli et al. 2008, p. 175). This inner drive or addiction component is not considered to be part of the concept of self-endangering work behavior presented here. Rather, we understand self-endangering work behavior as a reaction designed to cope with excessive work demands that occurs specifically under the condition of high requirements for self-organization and self-leadership (Baeriswyl et al. 2014; Krause et al. 2012, 2014). Nonetheless, despite these differences in the underlying causes, the behavioral consequences of workaholism may resemble self-endangering work behaviors in many ways.

Finally, *overcommitment* (Siegrist et al. 2004) may have similarities with the concept of self-endangering work behavior. This is particularly true for its theoretical conceptualization. Overcommitment is defined as an enduring cognitive-motivational pattern of maladaptive coping with demands characterized by excessive striving and an inability to withdraw from obligations (Siegrist et al. 2004). Overcommitted individuals are driven by their high need for control and approval. They tend to permanently overtax their own resources, which may eventually result

in exhaustion and breakdown (Joksimovic et al. 1999); thus, in this respect, overcommitment is similar to the presented construct of self-endangering work behavior. However, when it comes to its operationalization, Siegrist et al.'s (2004) overcommitment scale does not focus primarily on specific behaviors but rather on psychological consequences ("strain") of an excessive engagement with work (e.g., being unable to switch off mentally). Thus, self-endangering work behavior is a distinct construct that focuses exclusively on specific behaviors without capturing the psychological consequences of its operationalization.

5 Effects of Self-Endangering Work Behavior

In contrast to both the above-mentioned work engagement and active and problem-focused coping (Nielsen and Knardahl 2014; Wallace et al. 2010), we suggest that self-endangering work behaviors may have harmful effects. As an attempt to cope with high work demands, self-endangering work behavior may mediate the detrimental effects of excessive work demands on well-being; however, if it results in successfully coping with challenging demands, it may also contribute to feelings of accomplishment, competence, or pride (Widmer et al. 2012). The challenge—hindrance framework states that positive effects of challenge stressors are always accompanied by parallel effects on strain and exhaustion. Correspondingly, we assume that when it comes to self-endangering work behaviors, psychological costs such as irritation, exhaustion, feelings of insufficiency, or psychosomatic complaints will—in the long term—prevail over potential positive effects (Hockey 1997; Schönpflug 1987; Semmer et al. 2010).

Most of the initial studies investigating the effects of self-endangering work behaviors have confirmed its assumed detrimental effects (Baeriswyl et al. 2014; Deci et al. [Coping in Flexible Working Conditions – Engagement, Disengagement and Self-Endangering Strategies, manuscript under review]; Dettmers and Deci 2014). Furthermore, self-endangering work behavior contributes to explaining psychosomatic complaints and emotional exhaustion after controlling for the direct effects of stressors and other coping behaviors such as engagement or disengagement coping as conceptualized in Carver et al.'s (1989) COPE inventory (see also Dettmers and Deci 2014). Baeriswyl et al. (2014) have tried to integrate the self-endangering work behavior of presenteeism into the job demands–resources model. Results of a study on 579 teachers reveal that presenteeism mediates the effect of work demands on burnout.

So far, there is no evidence for the assumed positive short-term effects of self-endangering work behavior. Studies trying to test this relationship (e.g., Dettmers 2014) have failed to relate self-endangering behavior to perceptions of challenge or challenging effects of stressors such as time pressure.

6 Consequences for Prevention

Flexible work arrangements that build on the capacity of employees for selforganization and self-leadership are an increasing phenomenon in the world of work. From the point of view of occupational health, there is a need to identify criteria for analyzing, evaluating, and designing flexible work arrangements because the associated growing requirements for flexibility and self-organization may overtax the capabilities and internal resources of employees. Furthermore, there is an increased risk of inadequate coping reactions when faced with high work demands. In this chapter, we have introduced the concept of self-endangering work behavior as a means of coping with high demands for flexible and autonomous forms of work organizations; it is a mechanism aimed at mediating the negative effects of stressors that has incremental value above the effect of the stressor and traditionally conceptualized coping behaviors. The few studies conducted on this topic have confirmed this view. Based on theoretical assumptions and empirical results, we propose that health-oriented prevention should take into account the need to reduce self-endangering work behaviors, particularly in organizations using indirect leadership techniques that aim at employees to identify with organizational work goals. These organizations have to be aware that the adoption of excessive work goals may have detrimental effects on employees via the use of selfendangering work behavior. A health-oriented strategy would have to systematically assess the occurrence of self-endangering work behavior and initiate processes that encourage employees to reflect on and change these behaviors. The identification of risks to health before problems actually occur could be achieved by including assessment of self-endangering work behavior in early warning systems within general work-related risk assessment and employee surveys. Finally, employees should be encouraged to take decisions and be flexible in meeting not only organizational requirements but also their personal needs and interests, and to openly discuss work goals that seem to be unattainable with the given resources and deadlines. These topics should be part of an open culture of negotiation between leaders and followers within an organization.

Generally, assessing self-endangering work behavior may be a promising way of identifying excessive work demands. For the analysis, evaluation, and design of flexible work, we propose that, alongside traditional criteria such as ergonomic and task design, managers also need to consider coping strategies and their effects on well-being. Human-oriented work design should minimize the use of self-endangering work behavior as a prerequisite for achieving work goals. If analysis detects self-endangering work behaviors, this may indicate that work organization and performance management are exceeding individual capacities (e.g., unrealistic work goals and fixed non-negotiable deadlines). Assessing self-endangering work behaviors may be a promising way of initiating reflective processes within an organization's staff aimed at finding new ways of coping actively that have less adverse effects, and of developing a problem focus that is sustainable in the long term. Well-validated instruments that focus on a variety of self-endangering behaviors (Deci et al. under Review; Krause et al. 2014) or single aspects such as

presenteeism (Hägerbäumer 2011) are useful tools for promoting prevention within these new forms of work.

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