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## New directions in burnout research

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### ABSTRACT

Burnout is a phenomenon that has received considerable research attention in the past 50 years. As such, there is advanced knowledge on its prevalence, conceptualization, predictors, and outcomes. Although the literature has advanced, research on burnout is still topical. Burnout originated in the seventies but remains a contemporary problem because of persistent environmental stressors and challenges for employees and organizations as a whole. The current special section aims to stimulate knowledge on unresolved issues by bringing together contributions related to 1) the role of cognition in burnout research, 2) the development of burnout over time, 3) contextual antecedents of burnout, and 4) the prevention of and recovery from burnout. It is our hope that we will see more high-quality research and evidence-based practice related to burnout.

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Although work is an important activity through which individuals may satisfy their basic psychological needs, the experience of work can sometimes become so overwhelming that it leads to job burnout – a combination of chronic exhaustion and a negative, cynical attitude towards work. Using the 2015 data of the European Working Conditions Survey, Schaufeli (2018) found that the prevalence of burnout was 10% for the European workforce, and 17% for workers in non-European countries. Another large study conducted around the same time in the United States showed that 28% of the millennials felt frequently or constantly burned-out, compared to 21% of all workers that belonged to older generations (Pendell, 2018). Although the referenced studies used imperfect measures and operationalized burnout only through the exhaustion component, these percentages illustrate that burnout affects millions of individuals and represents a fundamental challenge in working life.

### Where does burnout research stand?

The term burnout was introduced in the 1970s by Herbert Freudenberger to describe the gradual emotional depletion and loss of motivation he observed among people who had volunteered to work for aid organizations. Around the same time, Christina Maslach and her colleagues interviewed human services workers in California to find out how they were coping with client-related stressors (Maslach & Jackson, 1981). The human services workers used the term “burnout” and indicated that they experienced feelings of exhaustion, had developed negative attitudes towards their clients (depersonalization), and often felt that they lacked the professional competence needed to help their clients (Schaufeli et al., 2009). Originally,

scholars assumed that burnout was a response to chronic emotional and interpersonal or social stressors at work (Maslach et al., 2001). However, the idea that burnout is exclusively found in the human-services sector was rejected in the 1990s. Since then, scholars have adapted a more general conceptualization and operationalization of burnout to make it applicable to workers in all kinds of occupations – including those outside the human services (Demerouti et al., 2003; Leiter & Schaufeli, 1996; Shirom & Melamed, 2006).

As is often the case in thriving research areas, after 50 years of research, there is still no consensus about how burnout should be conceptualized and measured. A recent review by Canu et al. (2021) shows that no less than 13 different definitions of occupational burnout were published between 1974 and 2019. Despite the wide variety of burnout definitions, there is common ground regarding the concept. Most scholars agree that exhaustion is the core constituting and necessary component of burnout. To illustrate, exhaustion was mentioned in 12 of the 13 definitions that are presented in the forementioned review. However, the nature of the exhaustion is still debated. Does burnout refer to emotional exhaustion, physical exhaustion, cognitive exhaustion, or a combination of these? In a similar vein, research has by now consistently linked burnout to some kind of cognitive impairment (Deligkaris et al., 2014). Some researchers regard cognitive weariness (having slow thinking processes and reduced mental agility) as a main dimension of burnout (Shirom et al., 2006). On top of that, several studies have shown that burnout patients continue to suffer from some form of cognitive decline for a long time (i.e., Oosterholt et al., 2016; Van Dam et al., 2012). Taken together, notwithstanding the fact that there seems some agreement among experts that burnout is at least about feeling exhausted

and impaired cognitive functioning, it seems that the discussion about what burnout constitutes has not yet reached a conclusion.

The relevance of burnout should not only be highlighted by its prevalence but also by its outcomes which can be both on the individual and the organizational level. On the individual level, burnout can have long-term effects on the health of the victims, as for instance, several studies have shown that those with high levels of burnout had a higher rate of hospital admissions for cardiovascular problems (Ahola & Hakanen, 2014; Toker et al., 2005; Toppinen-Tanner, Ahola, Koskinen & Väänänen, 2009) and a greater risk for mental health problems (Ahola & Hakanen, 2014). On the organizational level, burnout can lead among others to lower productivity, and reduced effectiveness, job satisfaction and commitment to both the job and organization (Van Bogaert et al., 2010; Williams, Manwell, Konrad & Linzer, 2007). Moreover, burnout has also been associated with absenteeism, the intention to leave the job and actual personnel turnover (Laschinger, Wong & Grau, 2012; Leiter & Maslach, 2009). What might even be more troublesome for organizations is the evidence that burnout can be contagious among colleagues (Bakker, Le Blanc, Schaufeli, 2005; Bakker, Westman & Schaufeli, 2007). Thus, research of the past decades has produced a wealth of knowledge on the predictors and outcomes of burnout.

Maslach et al. (1996) introduced the Six Areas of Worklife Model in an attempt to structure the large number of studies on organizational risk factors for burnout. The model suggests that burnout may arise from a chronic mismatch between employees and their work setting in terms of the following six areas: workload, control, reward, community, fairness, and values. This approach emphasizes the importance of looking at workers in context, rather than just looking at individual or situational factors (Maslach et al., 2001). The most frequently used theory to explain the causes and consequences of burnout is arguably Job Demands-Resources (JD-R) theory (Demerouti et al., 2001; Bakker & Demerouti, 2017). Accordingly, burnout is the result of two independent processes: a health impairment process and a (reduced) motivational process. The health impairment process departs from high or badly designed job demands, which are defined as those aspects of the job that require considerable employee effort and may therefore result in physical or psychological costs (Bakker & Demerouti, 2014), such as high workload, long work hours, or conflicts with colleagues. The motivational process departs from job resources, which are those aspects of work that are energizing, facilitate goal achievement, and enable personal development (Bakker & Demerouti, 2014), such as social support, developmental opportunities, and task variety. Whereas exhaustion is the core outcome in the health impairment process, cynicism or disengagement is the core outcome of lacking job resources in the motivational process. Based on reviews and meta-analyses, it can be concluded that a high workload (i.e., work pressure, time pressure, work-home interference) and a lack of resources (i.e., social support, feedback, autonomy) are among the most important factors that can cause burnout (Alarcon, 2011; Schaufeli & Bakker, 2020). However, this research is generally cross-sectional and based on self-reports, which has evident limitations (Althubaiti, 2016).

## Why burnout research remains topical

The interest in burnout has persisted over 50 years but in our view it is still timely and topical. A search in Google scholar results in more than 1.22 million hits (April, 2021; excluding references). However, there is a downward publication trend as the hits from 2017 to 2020 are reducing per year (2017: 51,300 hits; 2018: 41,600 hits; 2019 40,400 hits; 2020; 40,000 hits). Although burnout is so broadly researched, it has only recently been recognized as an occupational phenomenon by the World Health Organization in the International Categorization of Diseases (ICD-11; WHO, 2019). It is not classified as a medical condition but the definition of WHO follows the three-dimensional conceptualization of Maslach et al. (2001). This is a first step forward, but also raises important theoretical and practical questions given the ongoing debate about the conceptualization and definition of burnout.

Recent economic problems in Europe highlight another reason why high-quality research on burnout is topical. The economic problems in Europe have impacted organizational life by putting pressure on employees to handle more job demands with fewer resources (a condition that increases the risk of burnout). There is evidence that the relationship between job characteristics and well-being is dependent not just on individual differences or micro-organizational contexts, but potentially also on macro-economic factors (Daniels et al., 2007). Moreover, macro-economic and institutional factors may influence the development of job resources in different countries (Holman, 2013). Theoretically, there is growing interest in understanding how micro- and macro-organizational contexts may influence worker well-being and performance (Van Veldhoven & Peccei, 2015). Given recent economic and political upheavals in Europe, understanding which aspects of one's job are important for well-being in different economic contexts has a clear interest across different European countries, and worldwide.

In a highly competitive global market, organizational decision-makers need answers to the question which organizational policies help to protect employee well-being and prevent burnout, while simultaneously ensuring work engagement and productivity. For instance, there are indications that interventions to improve job design should be based on assessments and redesign of the characteristics tailored to specific organizational and job function contexts and without a strict preconception of which job characteristics to target. This happens by means of job crafting where individuals learn to adjust their job characteristics themselves (e.g., Van den Heuvel et al., 2015). The bottom-up job crafting approach forms a sharp contrast with other approaches, favoured by national and EU policy bodies, based on standardized assessments and a pre-defined list of job characteristics to re-design. The tailoring of job characteristics assessments and interventions to specific contexts also provides challenges to scientific orthodoxy that seemingly requires the use of standardized instruments to cumulatively and incrementally build knowledge.

Due to socioeconomic reasons and its prevalence, burnout remains an issue that does and should concern both research and practice. Researchers should be concerned with burnout, because although there are many studies on burnout, there are

only a few seminal academic publications on burnout. These publications mainly refer to reviews and meta-analyses (e.g., Alarcon et al., 2009; Maslach et al., 2001) instead of empirical studies that apply elaborate research designs that can uncover the complexity of burnout integrating, for example, (quasi-) experimental research, multiple physiological and behavioural indicators, and repeated measures to uncover its development, changing nature, etc. Such high-quality research will not only have important scientific but also practical implications as it can inform practice to implement evidence-based approaches to burnout. Up to now, we observe that each consultancy firm follows their own approach (to diagnose, counsel, treat, coach, or prevent burnout), with questionable or at least unclear effectiveness. An evidence-based and scientific approach to burnout and high-quality research designs are important since we observe a gap between the knowledge and approaches of academics and practitioners. If burnout scholars do not talk to individuals with burnout and burnout practitioners do not read scientific literature on burnout, the puzzle of burnout cannot be solved.

### Unresolved issues in burnout research

Even though we already know a lot about burnout, there are still several unresolved issues in burnout research. In the following, we discuss several issues that we believe have not yet been resolved and therefore deserve more research.

### Conceptualization and diagnosis of burnout

In line with the WHO conceptualization, burnout has been approached as a multidimensional concept. The proposed conceptualization of burnout is based on Maslach et al.'s (1996) framework, but the instrument based on this conceptualization has not been developed for diagnostic purposes. Not surprisingly, we do not know the "tipping point" beyond which the score on the burnout instrument signals a clinical disease and thus, we do not know how to differentiate between mild burnout symptoms (i.e., those potentially at risk) and the burnout syndrome (Bauernhofer et al., 2018; Schaufeli et al., 2001). Added to this debate is also the fact that clinical psychologists, who treat individuals with burnout, use different diagnostic tools/criteria than the instruments used by scholars in organizational psychology. In addition to this, there is a discussion on the overlap and the differences between burnout and depression. Like burnout, depression, next to depressed mood, is also characterized by complaints of fatigue and loss of energy (American Psychiatric Association, 2013). Not surprisingly, Bianchi et al. (2021) found in a meta-analysis of 14 studies that depression and the exhaustion component of burnout, as measured by Maslach et al.'s (1996) instrument, overlap with a correlation of  $r = .80$ . Such tests, however, fail to understand burnout as an occupational syndrome which is caused by work (Bakker et al., 2000), and is characterized by the simultaneous experience of a specific pattern of symptoms that are chronic. With this special section, we hope to help move the field of burnout research forward and stimulate academic debate regarding what constitutes burnout. The article of Van Dam (this issue) aims to contribute to this discussion.

### Burnout and objective measures

Except for the study of Demerouti et al. (2001), we are not aware of any other study that captures the various hypothetical causes of burnout using measures independent of job owners' appraisals. Thus, research on the causes of burnout can be criticized for being flawed by common method variance. Similarly, the empirical evidence in terms of outcomes indicates that as soon as burnout scores are linked to outcomes measured with other ratings than self-reports, the relationship becomes weak to nonsignificant. For instance, literature reviews show that the link between burnout and objective (or other-rated) performance outcomes is much weaker than the link between burnout and self-reported performance (e.g., Taris, 2006). Moreover, although the meta-analytical correlations between exhaustion and performance are significant and negative, the evidence for the relationships between (a) depersonalization and reduced personal accomplishment and (b) job performance is inconclusive. Why is this the case? Can this be explained by measurement issues or theory (as long as individuals work, their performance may not be seriously affected)? Or is the lacking link between burnout and performance due to the fact that individuals with high burnout scores are usually not included in empirical research? It has also proven difficult to find biomarkers for burnout although some studies point to the possibility that dysregulation of the hypothalamic-pituitary-adrenal axis (which controls the release of cortisol) may be indicative of burnout (e.g., Marchand et al., 2014).

### Development of burnout over time

A second issue we do not fully understand yet is how burnout develops over time. As burnout develops gradually over time, there have been various attempts to specify the stages of its developmental process. One example is the 12-Stage Burnout Cycle (Freudenberger, 1970), that describes a gradual decline in both psychological and physical burnout symptoms. Other examples are the Three Stages of Burnout (Girdin et al., 1991), the Four Stages of Burnout (Gorkin, 2004), and the Five Stages of Burnout (Miller & Smith, 1993) models – all of which suggest a sequential process of burnout with its corresponding symptoms. The last developmental model worth mentioning has been proposed by Ekstedt and Fagerberg (2005), who interviewed people suffering from burnout. The resulting model consists of eight constituents: an inner incentive or a drive for life; feeling responsible for an increasing workload and the lack of time spent with family; threatened self-image due to failure; cutting off everything that interfered with their struggle; bodily and psychological manifestations; overwhelming fatigue; and reaching the bottom line or inability to see any meaning in life. These models underline the reasoning that even though employees might suddenly experience burnout, the syndrome does not develop overnight. Moreover, as illustrated by Escartin et al. (this issue), the emotional exhaustion experienced by individual employees and work units as a whole may result from a poor psychosocial safety climate. Such a climate evolves slowly over time, and signals that management does not prioritize employee health.

To empirically study the development of burnout over time, longitudinal research is needed. Over the years, burnout has occasionally been studied using longer term longitudinal e.g., three years (e.g., Hakanen et al., 2008) and daily diary designs (e.g., Xanthopoulou & Meier, 2014). Although these studies indicate that burnout fluctuates both between and within persons, there is still lack of empirical evidence regarding how burnout develops over time and whether it represents a long-term or short-term, linear or non-linear developing experience. It is conceivable that people who are confronted with high job demands first show fluctuating levels of burnout symptoms – since they still manage somehow to cope with their job demands – and that later they show more stable high levels of (chronic) burnout. In this special issue, Mäkikangas and her colleagues identified three development profiles of burnout symptoms using 8-year longitudinal data.

### **Burnout prevention**

A central problem in the burnout literature is that interventions to effectively prevent and reduce burnout are often advocated, but rarely designed and studied. Most interventions published today focus on stress reduction among individuals who suffer from burnout, through relaxation, mindfulness, and cognitive behavioural therapy (Maslach et al., 1996). The core aim of these interventions is symptom control and stress relief. Since these interventions do not remove the causes of burnout, they do not qualify as effective solutions for burnout. Since there is overwhelming evidence that burnout is the result of a combination of high job demands and low job resources, organizations should try to redesign their workplaces and optimize job characteristics. Adjusting the job demands and job resources at the organizational level will improve the work engagement of all employees and will safeguard against daily job stress and chronic burnout. Systematic research on how to conduct such interventions and how effective they are for various contexts and groups of employees is still lacking (Tetrick & Winslow, 2015). Another possible way forward is to build on recent evidence showing that those who score higher on burnout respond differently to short-term job demands (Bakker & Costa, 2014; Meier et al., 2014) and have more difficulty to cope in an adaptive way – for example, by using recovery and job crafting strategies (Bakker & De Vries, 2021). These findings clearly indicate that interventions should be tailored to the employees involved (see also van Dam's article in this special issue on the treatment of clinical burnout). Future research could test adjusted job crafting interventions for individuals scoring high on burnout, with, for example, more attention for optimizing demands (Demerouti & Peeters, 2018), and alternative energy management, leisure crafting, and recovery strategies (Op den Kamp et al., 2018; Petrou & Bakker, 2017). Since individuals with high levels of burnout have limited energy resources, it would also be interesting to test the effectiveness of selection, optimization, and compensation strategies (Demerouti, 2015). How can those with high levels of burnout select work tasks that are least straining? What are possible individualized ways to optimize the work context or job design and compensate work-related effort? These are important questions that should be answered in future

intervention studies. One of the articles in this special issue (de Vries et al., 2021) examines the effectiveness of an exercise intervention to combat fatigue.

### **Burnout recovery**

A final unresolved issue refers to the tertiary prevention of burnout: how we can best help burned-out individuals? Current research and practice lack solid knowledge about effective treatment of burnout. Most of the intervention studies that have been published concern preventive interventions at the individual level. A number of meta-analyses show that these types of interventions (such as relaxation and cognitive behavioural interventions) have small but consistent effects (e.g., Maricutoiu et al., 2016; Lancu et al., 2018). The evidence for interventions focusing on treating employees who really suffer from burnout, is very limited. Ahola et al. (2017) only found four studies with a solid design that were based on employees with severe burnout complaints, and none of these showed a positive effect. It is still unclear what are theoretically grounded and evidence-based best-practice guidelines for interventions to reduce burnout levels of individuals and groups particularly after they have developed burnout. Research on re-integration of employees with long-term sickness absence due to mental health problems including burnout, shows that the majority of re-integration interventions exclusively uses cognitive behavioural therapy. Although this may be sufficient to reduce psychological symptoms, it is not sufficient to help people re-integrate to work (Blonk et al., 2006; Ejeby et al., 2014). Not surprisingly, the effectiveness of these types of interventions is not yet convincing (Finnes et al., 2019). Adding work-related exercises to the therapy sessions (e.g., making a reintegration plan, a problem analysis of the work situation) showed that patients who followed such a treatment returned to work faster than patients who followed traditional cognitive behavioural therapy (Lagerveld et al., 2012). This indicates that burnout recovery will need to happen through both job (re)design and symptom treatment (see also van Dam's (2021) article in this special issue).

### **What is this special issue about?**

The six papers in this special issue address some of the previously mentioned unresolved issues. They are related to 1) the role of cognition in burnout research, 2) the development of burnout over time, 3) contextual antecedents of burnout, and 4) the prevention of and recovery from burnout. First, using a two-wave study with one-year time lag among employee-colleague dyads, Lemonaki, Xanthopoulou, Bardos, Kardemas, and Simos (this issue) demonstrate that burnout is related to lower performance on working memory and inhibition capacity. In addition, burnout also related to more cognitive failures over time, while reduced cognitive flexibility associated with higher burnout over time. The paper by Kulikowski (this issue) challenges the view that burnout merely impairs cognitive functioning. He builds a theoretical model in which cognitive ability reduces burnout by fostering job resources and buffering cognitive job demands. Second,

the article of Makikangas, Leiter, Kinnunen, and Feldt (this issue) focusses on the development of burnout over time. Using latent profile analysis of 8-year longitudinal data with 5 measurement points they identify three development profiles of burnout symptoms: 1) stable, low burnout (78%), exhaustion instigated, increasing burnout (12%), and 3) cynicism and reduced professional efficacy dominated, inverted U-shaped burnout (10%). Van Dam (this issue), in his theoretical paper on the diagnosis, classification, and treatment of clinical burnout, argues that clinical burnout is not a linear process, but like many biological processes, a process with qualitatively different phases. These different phases include the lack of recovery, changes in stress physiology, chronic stress symptoms, pseudo psychopathology, and clinical burnout. Third, Escartin et al. (this issue) tested a multilevel model (i.e., unit- and individual level) of the contextual antecedents of burnout. In two different studies, they found that psychological safety climate was negatively related to workplace bullying and workplace bullying was positively related to employees' emotional exhaustion. Finally, de Vries, van Hooff, Geurts, and Kompier (this issue) developed and tested an exercise intervention for fatigued employees, consisting of two groups who either received a 6-week exercise intervention or were placed on the wait list. Participants in the exercise condition went for a one-hour low intensity run supervised by a trainer twice per week and once per week by themselves. Using latent growth curve modelling, de Vries and colleagues found that exposure to the exercise intervention was not related to the development of fatigue during the intervention. They did find that a minimum exposure to the exercise intervention needed was 3 weeks to observe changes in fatigue. Relatedly, in his theoretical paper on clinical burnout, van Dam (this issue) argues that work and organizational psychologists should adjust their interventions to the various burnout risk profiles; those with mild stress symptoms could benefit from stress management programme whereas individuals with excessive perseverance may be better off with a healthy lifestyle program. These early interventions are important, because – as Van Dam argues – recovery from clinical burnout may take more than a year. He outlines the three phases that can be distinguished in the treatment of clinical burnout, which are 1) crisis, 2) recovery of the stress system, and 3) prevention and learning from the past.

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