Addressing burnout in organisations

A literature review

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Contents

Abstract

Since its introduction in 1974, the concept of burnout has generated a lot of scientific research. The World Health Organization only recently recognised it as an occupational phenomenon, defined as a *'prolonged response to chronic emotional and interpersonal stressors on the job and characterized by the three dimensions of exhaustion, cynicism, and inefficacy'*. This paper provides a scoping literature review of burnout and possible interventions. The literature suggests that the current measurement instruments are not appropriate for diagnostic purposes, and their scores overlap substantially with other disorders, such as fatigue, anxiety and depression. A valid diagnosis of burnout requires a combination of questionnaire and interview data, including information about its causes. The review discovered that the main triggers of burnout are chronic exposure to high job demands and low job resources. Whereas individual characteristics (such as neuroticism) make some people more prone to burnout, there is no clear picture of what personality characteristics entail a higher risk. Burnout has detrimental effects on both individuals and organisations, however. Burnout interventions typically focus on stress-relief and coping strategies to deal with the high level of job demands, but their effects diminish over time. Research also shows that organisations focus primarily on the consequences of burnout, while more attention should be given to the underlying causes within the job. Evidence from organisational interventions shows that organisations can improve their employees' working conditions to reduce burnout risk. Combined interventions show promise: they allow the organisation to develop a healthy work environment, while employees can deal adequately with (sporadic) stress. Social partners need to urge governments and policymakers to support research on burnout to develop clear diagnosis and treatment of burned-out employees together with preventive measures to reduce the psychosocial risks in the work environment.

1. Introduction

There has been interest in burnout for over 50 years, but in our view it is still topical. Burnout affects workers across various sectors, including health care, education and technology. While research trends provide valuable insights into the causes and effects of burnout, it is important to go beyond the numbers and statistics and to conduct open discussions about the issue. By acknowledging and addressing burnout, individuals and organisations can take steps to prevent it and promote well-being. A search of Google Scholar shows more than 1.8 million hits (November 2023). The number of hits was relatively stable and below 70,000 per year from 2017 to 2019, as well as in 2022 (Figure 1). This trend was interrupted in 2021 (perhaps because of the Covid-19 pandemic), as the number of hits increased to almost 90,000 between 2020 and 2021. Although burnout is broadly researched, it was only recently recognised as an occupational phenomenon by the World Health Organization (WHO) in the International Categorization of Diseases (WHO 2019).

Furthermore, a questionnaire focused on stress-related occupational diseases distributed to national experts of 28 (then) European Union countries showed that only nine out of the 23 responding countries (Denmark, Estonia, France, Hungary, Latvia, Netherlands, Portugal, Slovakia and Sweden) acknowledge burnout as an occupational disease (Lastovkova et al. 2018). According to this study, patients with burnout syndrome receive social insurance benefits only in five countries, namely Denmark, France, Latvia, Portugal and Sweden. One reason why burnout has not yet been officially accepted as an occupational disease is the absence of a precise individual diagnosis for it (in contrast to the diagnosis of anxiety, adjustment disorder or depression) and the insufficient information on how to capture psychosocial risks in risk assessments related to burnout. The recognition of burnout is somewhat problematic because national classifications – for example, in Sweden and the Netherlands – define it differently from how it is described in research. For instance, according to the Dutch classification, burnout is equated with neurasthenia, whereas according to the Swedish classification, it is equated with exhaustion disorder, which is not necessarily work-related. The lack of an official diagnosis of burnout, however, hinders access to treatment, disability coverage and workplace accommodations (Eurofound 2018). Despite these ambiguities, the prevalence of burnout complaints as measured in questionnaires around 2015 was 10% among workers in European countries and 17% among workers in non-European countries (Schaufeli 2018). In the United States, 28% of millennials report in questionnaires that they frequently or constantly experience burnout symptoms, compared with 21% of all workers belonging to older generations (Pendell 2018). The report does not state what is meant by

'frequently', which is in line with the current lack of specific measurement and diagnosis of the syndrome.

Figure 1   **Google Scholar results for the term 'Burnout'**
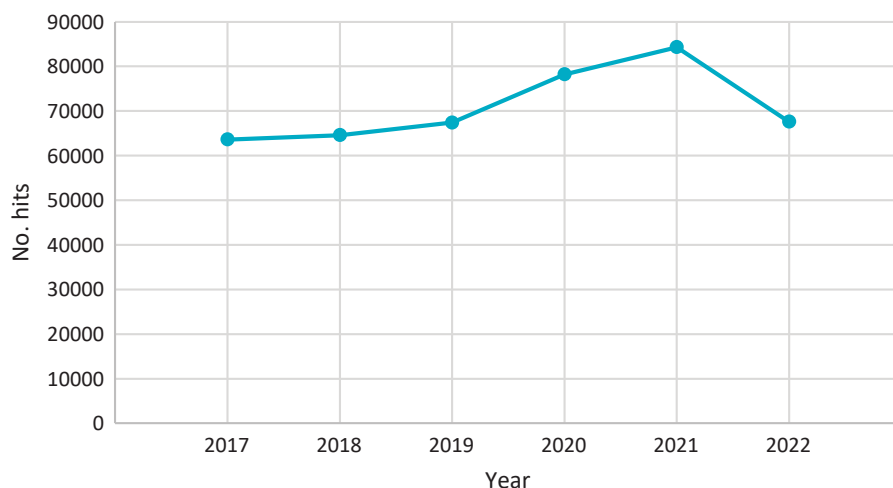
Source: author's own compilation.

This working paper provides a scoping review of the literature on burnout in organisations and possible interventions to prevent or mitigate it. This is carried out by focusing on existing meta-analyses for a thorough investigation, supplemented by other studies, when required. Although the review is not systematic, a PRISMA diagram and a complete description of the different steps involved in the review can be found below (Figure 2). The review might not be able to solve the ambiguities related to burnout, but it can be a first step in this direction, providing a review of the definition, measurement and diagnosis of burnout. Differences in the experience of burnout among socio-demographic groups and the differences between burnout and similar disorders, such as depression and anxiety, will then be discussed. Various causes and consequences of burnout will also be reviewed. This information will be used in the conclusion to review the types and effectiveness of interventions to adequately deal with burnout, which are the main focus of this review.

2. Methodology of literature study

Figure 2 shows the PRISMA flow diagram illustrating the literature search, identification, screening and assessment for eligibility leading to the final article. We employed the framework for scoping reviews recommended by Tricco et al. (2018). First, studies were identified via databases and registers. An initial set of articles was obtained by formulating an appropriate search query (n=180), consisting of 'Burnout' AND ('Meta Analysis' OR 'Literature Study'), which was used to search in the title, abstract and keywords. Then, records were removed before screening, which in this case involved only removing duplicate articles (n=3). The resulting articles were screened based on their title and abstract (n=177). This was to remove any articles that clearly do not provide any relevant information. Based on this screening, irrelevant articles were removed (n=63), leading to a set of articles to be retrieved (n=114). Articles that did not have a full-text version available online were removed (n=1). The resulting set of articles (n=113) was screened based on the full text. Articles were excluded based on several exclusion criteria: (i) not relevant to the research; (ii) published before 2000; and (iii) no new information (n=91). For example, a paper was excluded if the context differed significantly from that of regular workers in Europe (for example, frontline nurses in China during the Covid-19 pandemic). Papers were also excluded if they were published before 2000 because research on burnout has developed significantly over the years and new insights are being obtained all the time (relevant old information still holds and thus is incorporated in novel research). Papers that did not provide any novel information were excluded because they could not add new value. This occurred, for instance, if a paper largely repeated the information of an earlier paper that was already included in the review, or if a paper reviewed the literature for a specific context. which was already discussed in another review. This resulted in a final set of articles to be used in the literature study.

Besides this systematic search, we also searched for additional studies in other ways, such as citations found in the reviewed articles, or by simply manually searching for appropriate articles. An initial set of articles was identified (n=22). Because a manual search was performed, the set of articles did not include any duplicates. Moreover, all articles were available as full-text versions. This additional set of articles (n=22) was screened based on the abovementioned exclusion criteria, which excluded articles that did not provide the necessary information (n=7). This led to a final set of articles (n=15), which was merged with the other set of articles resulting from the database search.

Figure 2 **PRISMA diagram**

Identification of studies via databases and registers

Identification

Records identified from:
Databases (n = 180)

Records removed *before screening*:
Duplicate records removed (n = 3)

Screening

Records screened
(n = 177)

Records excluded
(n = 63)

Reports sought for retrieval
(n = 114)

Reports not retrieved
(n = 1)

Reports assessed for eligibility
(n = 113)

Reports excluded:
Irrelevant (n = 58)
Published < 2000 (n = 6)
No new information (n = 27)

Included

Reports via databases
(n = 22)
Reports via other methods
(n = 8)

Identification of studies via other methods

Records identified from:
Manual search (n = 22)

Reports sought for retrieval
(n = 22)

Reports not retrieved
(n = 0)

Reports assessed for eligibility
(n = 15)

Reports excluded:
Irrelevant (n = 4)
Published < 2000 (n = 0)
No new information (n = 3)

Source: author's own elaboration.

3. Burnout

3.1 Definition

The concept and definition of burnout have been subject to discussion ever since Freudenberger first introduced the notion in 1974 (Bakker et al. 2023). Among volunteers working for aid organisations, he observed an 'extinction of motivation or incentive, especially where one's devotion to a cause or relationship fails to produce the desired results' (Freudenberger 1974: 159). The most systematic approach to conceptualising burnout was that of Maslach and Jackson (1981). They defined burnout as a syndrome characterised by emotional exhaustion (that is, feelings of being emotionally overextended and exhausted by one's work), depersonalisation (a negative, excessively detached response toward the recipients of one's service or care), and lack of personal accomplishment (feelings of incompetence and lack of achievement at work). Scholars initially assumed that burnout was a response to chronic emotional and interpersonal stressors at work (Maslach et al. 2001). This view was revised in the 1990s when Maslach et al. (1996) replaced the depersonalisation component with that of cynicism (namely, a distant attitude towards work in general and not necessarily towards other people), and Demerouti and Nachreiner (1998) defined burnout as a syndrome of chronic fatigue or exhaustion and disengagement from work. Besides the energetic and motivational dimensions, later conceptualisations included physical fatigue and cognitive weariness (Shirom and Melamed 2006) or cognitive and emotional impairment (Schaufeli et al. 2020) as core symptoms of burnout. In other words, burnout seems to have two sides: not being able (exhaustion) versus not being willing anymore (distance) (Schaufeli and Taris 2005).

Only recently has burnout been recognised as an 'occupational phenomenon' by the World Health Organization in the International Categorization of Diseases (WHO 2019). Notably, burnout was not classified as a medical condition. Instead, the WHO definition follows the three-dimensional conceptualisation of Maslach et al. (2001). Accordingly, burnout is a 'prolonged response to chronic emotional and interpersonal stressors on the job and is defined by the three dimensions of exhaustion, cynicism, and inefficacy' (Maslach et al. 2001: 397).

Out of the three dimensions, exhaustion is known to be the main symptom of burnout and its most apparent manifestation. Various researchers have introduced and used many other definitions of burnout, however, raising the question of how burnout should be defined precisely. Between 1974 and 2019, no less than 13 different original definitions of burnout were published (Guseva Canu et al. 2021). Many current definitions originated from one of the original 13.

This issue was tackled by conducting a meta-analysis to obtain a complete inventory of burnout definitions and develop a harmonised definition (Guseva Canu et al. 2021). The study found 88 unique definitions and proposed to define burnout as follows: 'In a worker, occupational burnout or occupational physical AND emotional exhaustion state is an exhaustion due to prolonged exposure to work-related problems' (p. 104). A panel of 50 experts agreed on this proposal, with an acceptance rate of 82%. Although this definition emphasises work-related problems as causes of burnout, it reduces burnout to a state of exhaustion, ignoring the other symptoms linked to it.

A number of issues remain regarding the conceptualisation of burnout. First, the World Health Organization retains the definition of burnout proposed by Maslach et al. (2001), but does not consider burnout a medical condition. Second, studies continue to debate the symptoms that characterise burnout. For example, burnout has been linked to cognitive impairment and some researchers therefore argue that cognitive weariness should be included as a primary dimension (Demerouti et al. 2021). Third, although many researchers agree that exhaustion represents the primary symptom of burnout, the nature of the exhaustion is still debated (Demerouti et al. 2021). In conclusion, new research has contributed to the development of a definition of burnout. However, the ongoing academic debate indicates that this development has not reached its conclusion (Bakker et al. 2023; Demerouti et al. 2021).

3.2 Measurement

The best known measurement of burnout is the Maslach Burnout Inventory (MBI), developed by Maslach and Jackson (1981). Based on the MBI, several adaptations have been made for different occupational types. These include the MBI-HSS for human services and health care, the MBI-ES for educational settings, and the MBI-GS for occupations that are not people-oriented (Edú-Valsania et al. 2022; Maslach et al. 2001). In addition to the MBI and its adaptations, many other measurements exist aimed at measuring general or occupation-specific burnout. Edú-Valsania et al. (2022) provide an overview of these instruments. Table 1 presents the various measurement instruments are found, categorised by their general nature.

Several issues arise in relation to the measurement of burnout. First, clinical psychologists view, measure and diagnose burnout differently from academics (Demerouti et al. 2021). Whereas the latter generally assess burnout through questionnaires, clinical psychologists hold that they cannot entirely rely on questionnaires in diagnosing burnout and must reconstruct the pathogenesis, that is, the history and sequence of life events, symptoms and mechanisms that led to the syndrome (Van Dam 2021). Also, the prevalence of burnout may be overestimated when it comes to the reporting of burnout complaints (as measured with questionnaires). Furthermore, the current questionnaires do not reflect the complexity of burnout (Edú-Valsania et al. 2022). Van Dam (2021) argues that measurement tools should be designed that consider both the antecedents and the physical and psychological consequences of burnout, thereby offering a

Table 1   Overview of burnout measurement instruments

Generic instruments		Instruments for specific populations	
Instrument	Measured dimensions	Instrument	Measured dimensions
Maslach Burnout Inventory (MBI)	(1) emotional exhaustion, (2) cynicism, (3) reduced professional fulfilment	Maslach Burnout Inventory-Human Services Survey (MBI-HSS)	(1) emotional exhaustion, (2) cynicism, (3) reduced professional fulfilment
Questionnaire for the Evaluation of Burnout Syndrome at	Political initiative	Political parties	Work–life balance, productivity
Copenhagen Burnout Inventory (CBI)	(1) personal burnout, (2) work-related burnout, (3) client-related burnout	Physician Burnout Questionnaire (PhBQ)	(1) burnout syndrome, (2) antecedents, (3) consequences, (4) personal resources
Oldenburg Burnout Inventory (OLBI)	(1) exhaustion, (2) disengagement from work	Teacher Burnout Questionnaire	(1) emotional exhaustion, (2) cynicism, (3) reduced professional fulfilment
Burnout Clinical Subtypes Questionnaire (BCSQ-36/12)	Frenetic: (1) involvement, (2) ambition, (3) overload Under-challenged: (1) indifference, (2) lack of development, (3) boredom Worn-out: (1) neglect, (2) lack of acknowledgement, (3) lack of control	Psychologist Burnout Inventory	(1) control, (2) overinvolvement, (3) support, (4) negative client behaviours
Burnout Assessment Tool (BAT)	BAT-C: (1) exhaustion, (2) cognitive, (3) emotional impairment, (4) mental distance BAT-S: (1) psychological complaints, (2) psychosomatic complaints	Burnout Questionnaire for Athletes	(1) emotional/ physical exhaustion, (2) reduced sense of accomplishment, (3) devaluation
Shirom–Melamed Burnout Questionnaire (SMBQ)	(1) emotional exhaustion, (2) physical fatigue, (3) cognitive weariness, (4) tension, (5) listlessness	School Burnout Inventory	(1) exhaustion at school, (2) cynicism towards the meaning of school, (3) sense of inadequacy at school
Shirom-Melamed Burnout Measure (SMBM)	(1) physical fatigue, (2) emotional exhaustion, (3) cognitive weariness	Parental Burnout Inventory	(1) exhaustion, (2) distancing, (3) inefficacy

Source: Edú-Valsania et al. (2022).

more global picture. They also argue that burnout measures should be analysed within the framework of theoretical models that consider cause, effect and correlates. This would allow for more tailored treatments of burnout because the measurement is more individualised. Finally, the authors note that more and more burnout measurement instruments are being developed. These differ in cutoff values, meaning that a given value may indicate the presence of burnout for one instrument, but not for others. In practice, this means that there is no consensus on the exact relationship between results and the presence (or absence)

of burnout. This is confirmed by Kleijweg et al. (2013) and Kaschka et al. (2011), who argue that instruments do not offer a reliable diagnosis of burnout and should thus be used carefully in combination with qualitative diagnosis.

To tackle this problem, a distinction should be drawn between 'statistical norms' and 'cut-off scores'. Statistical norms simply compare an individual's score with the distribution of the population (which also requires comparison with a representative sample, not just a convenience sample as in most burnout research). Comparing with the population only informs us whether someone scores 'higher' or 'lower' – in other words, its relative position. However, it is known whether 'higher' scores may mean 'too high'. To discover that, the 'cut-off' scores should be empirically determined by comparing them with patients suffering from burnout. In this way, we can tell whether someone scores 'too high' and (perhaps) has burnout. Such cut-offs have been developed for only a few instruments, (such as the BAT or the MBI) (Schaufeli et al. 2023).

3.3 Diagnosis

Unsurprisingly, the measurement of burnout has significant implications for its diagnosis. As already mentioned, the measurements and diagnoses of clinical psychologists differ from usage in the academic milieu (van Dam 2021). Because people who experience short-term stress show high scores on measures of burnout, similar to those suffering from mental health problems, such as depression and anxiety, clinicians cannot rely solely on questionnaires to distinguish between mild stress disorders and clinical burnout. Clinical psychologists must aim to reconstruct the causes and subsequent development of burnout symptoms, which can be achieved only taking a qualitative approach in which the history and life events are considered and analysed. In this way it is possible to differentiate between patients with short-term stress symptoms and patients suffering from clinical burnout. Patients suffering from clinical burnout see the presence of stress during their lifetime as normal, where even a minor stressor may act as a catalyst that causes the patient's collapse. The clinician must understand that what is important is not necessarily this minor stressor but the 'patient's entire timeline. In addition, it has proved challenging to distinguish mild burnout from clinical burnout because of the mismatch between measurement instruments and clinical applicability. The existing burnout questionnaires have not been developed for diagnostic purposes and have hardly been validated among clinical samples (Bakker et al. 2023). Burnout was subject to further medical interpretation when researchers tried to move from a strategy of grading levels of burnout to one whereby cases of burnout would be distinguished from non-burnout, with the intention of making it easier to access treatment (Eurofound 2018). Some researchers have used medical criteria, particularly ICD-10 diagnosis code F43-8 ('other reactions to severe stress'), to identify burnout cases and calibrate (the process of assigning values to a measuring device [instrument, test, or scale] relative to a reference standard[1]) self-reported answers to burnout questionnaires.

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1.   https://dictionary.apa.org/

Existing research, including meta-regression analyses, has identified a significant overlap between burnout, depression and anxiety, which makes the diagnosis of burnout difficult (Bakker et al. 2023; Chen and Meier 2021; Meier and Kim 2022). For instance, Chen and Meier (2021) found a positive association between burnout and depression among nurses (r=0.403, 95% CI=[0.327, 0.474], p<0.0001). Additionally, Meier and Kim (2022) showed that several studies had found an association between burnout and depression (r=0.612, 95% CI=[0.510, 0.697], p<0.0001). A different meta-analysis conducted by Koutsimani et al. (2019), however, found no conclusive evidence that the constructs are related and thus that longitudinal studies are needed to investigate this further. Specifically, the results showed a significant association between burnout and depression (r=0.520, SE=0.012, 95% CI=[0.492, 0.547]) and burnout and anxiety (r=0.460, SE=0.014, 95% CI=[0.421, 0.497]). However, moderation analysis for both burnout–depression and burnout–anxiety relationships revealed that the studies that used the MBI test or were of better quality (for example, longitudinal, appropriate scales and so on) showed smaller effect sizes, indicating that they are distinct constructs. Effectively, there appears to be an association between burnout, depression and anxiety but it is not so strong as to indicate an overlap between the variables. The moderator variables used for this study include: (1) MBI vs Non-MBI; (2) PHQ (Patient Health Questionnaire) vs Non-PHQ; (3) HADS (Hospital Anxiety Depression Scale) vs Non-HADS; and (4) Cross-sectional vs Longitudinal.

A review by Eurofound (2018) showed that most countries followed the latest WHO Classification, which emphasises overexhaustion and does not associate burnout with work and its conditions. Accordingly, Sweden is the only country that has implemented a specific diagnosis, using ICD-10 code F43.8A, '*utmattningssyndrom*' ('fatigue syndrome') as an approved medical diagnosis, classified under 'adaptation disorders and response to severe stress'. The criteria are (a) physiological or mental symptoms of exhaustion for at least two weeks, (b) fundamental lack of psychological energy, and (c) symptoms such as difficulty concentrating, decreased ability to cope with stress, irritability or emotional instability, sleep disturbances, muscle pain, dizziness, or palpitations. These symptoms are classified as *utmattningssyndrom* if they occur every day over two weeks, cause significant suffering with impaired work capacity, and are unrelated to any other psychiatric diagnosis, substance abuse, or medical diagnosis.

Taken together, this means that there is no validated way to diagnose burnout, and the overlap between burnout and several other mental conditions leads to increased difficulty in diagnosing burnout.

3.4   Comparison with other mental health conditions

As already mentioned, burnout overlaps significantly with other mental health problems, primarily depression and anxiety. Koutsimani et al. (2019) argue that although these conditions appear similar, they are different constructs that share characteristics and develop in tandem. Research by Nuallaong (2013) has summarised the differences between burnout symptoms and psychiatric disorders. An overview of the differences per psychiatric disorder is provided below.

3.4.1 Burnout and chronic fatigue

Chronic or persistent fatigue from job stress is a reversible process widely seen in the working population and a common complaint within the healthcare sector. Several symptoms appear similar to burnout, including illness, the need to restore depleted energy, and external causal attributes. However, the longitudinal causes of burnout and chronic fatigue appear very different. People with regular exhaustion can bounce back after resting. If exhaustion is prolonged, burnout can occur. Moreover, burnout consists not solely of the experience of exhaustion but also of symptoms of cynicism/distancing from work and impairment of (cognitive) functioning at work. Table 2 presents a comparison between burnout and regular stress manifestations from chronic fatigue.

Table 2 **Comparison between burnout and chronic fatigue**

Burnout	Chronic fatigue
Disengagement	Over-engagement
Blunted (dull) emotion	Over-reactive emotion
Primarily emotional damage	Primarily physical damage
Loss of motivation and drive	Loss of physical energy
Producing demoralisation	Producing disintegration (unconscious impulses against deeper and unspeakable dread)
Sense of helplessness and hopelessness	Sense of urgency and hyperactivity
Producing panic, phobia or anxiety symptoms	Producing paranoia, depersonalisation and detachment

Source: Nuallaong 2013.

3.4.2 Burnout and depression

Late stages of burnout can share many symptoms with depression. Hence there is some confusion about the overlap of the conditions (Chen and Meier 2021; Koutsimani et al. 2019; Meier and Kim 2022). These symptoms include sadness, fatigue, inability to concentrate, feelings of dysphoria, and low energy. However, burnout appears unique because of the work-related context and the depletion of emotional resources, whereas depression does not have a specific context and involves a lower emotional state. Additionally, the burnout process develops in a considerably different manner from the usual development of depression. A depressive episode is characterised by a depressed mood most of the day for two weeks, with no history of manic episodes and no direct effects from substances. Furthermore, depressive episodes must present at least four somatic (biological, vital or melancholic) symptoms. These include loss of interest, loss of pleasurable feelings, reduced capacity for enjoyment, interest, and concentration, decreased self-esteem and self-confidence, ideas of guilt, sleep disturbance, depression, agitation, diminished appetite, weight loss, or loss of libido.

3.4.3   Burnout and neurasthenia

Neurasthenia, also known as fatigue syndrome, is a condition characterised by increased fatigue after cognitive effort (Nuallaong 2013). Additionally, two other symptoms often occur – physical weakness and exhaustion, muscular pain, inability to relax, dizziness, headaches, sleep disturbance, worry, irritability, inability to experience pleasure, and mental fatigue. Several symptoms of neurasthenia overlap with those of burnout, including mental fatigue, physical weakness and exhaustion after minimal effort. Neurasthenia cannot describe all symptoms of burnout because it looks primarily at physical rather than mental dimensions. Nor does it emphasise the importance of work-related causes, and it is additionally considered a minor diagnosis, which varies from culture to culture. However, it is still viewed as a syndrome of interest among the Chinese and Japanese medical communities and often occurs within the work context. It may be stated that this work-related fatigue syndrome, under different names, is of interest in many regions but with different definitions and social contexts.

3.4.4   Burnout and adjustment disorder

Adjustment disorder is defined as a disease that causes significant reactions to adjustment and the severe stress associated with it (Nuallaong 2013). Factors that can cause stress may be related to the following: social network (such as the departure of a person close to you), social assistance or appreciation (such as settlement or being an immigrant), age transition, or crisis (such as school enrolment, parenthood, retirement). Symptoms include sadness, anxiety, inability to cope with problems or situations, and decreased daily performance. In short, an adjustment disorder causes stress because of an inability to cope with new situations. This differs from burnout, as burnout is a reaction to ongoing stressors and an inability to cope with stressors adequately.

In short, burnout differs from chronic fatigue, depression, neurasthenia and adjustment disorder in the following ways:
- **Diagnosis**: burnout does not have specific criteria for diagnosis, whereas other conditions do.
- **Cause**: burnout, and neurasthenia are related to job stress, whereas other conditions are not specific.
- **Physical symptoms**: burnout can present any physical symptoms of depression and anxiety. However, these are not specific.
- **Emotional symptoms**: burnout affects the quantity of mood (depleting), whereas other conditions affect the quality of mood (depression or loss of interest).
- **Cognitive symptoms**: burnout shows a negative attitude toward others and oneself, whereas others show reduced mental function.
- **Duration**: burnout does not have a specific duration, whereas other conditions do.

Toker et al. (2005) have provided the following explanation for the high correlation between burnout, depression and anxiety. Specifically, during its early

stages, burnout may occur concomitantly with a high level of anxiety because of the active coping behaviours that usually entail a high level of arousal. When and if these coping behaviours prove ineffective, the individual may give up and engage in emotional detachment and defensive behaviours that may lead to depressive behaviours.

3.5   Socio-demographic differences

Because of the complexity of burnout syndrome, it should come as no surprise that burnout is manifested differently from person to person. Research by Purvanova and Muros (2010) focusing on gender differences in burnout found that female employees are likely to experience burnout differently from male employees. Women become slightly more emotionally exhausted than men, while men become somewhat more depersonalised.[2] The study also found that gender differences were more significant in the United States than in the EU, meaning that the differences in emotional exhaustion between males and females are greater. However, gender differences did not vary significantly in male-typed vs female-typed occupations. This may indicate that possible gender differences may be attributed to the effects of the job rather than to gender.

A meta-analysis was conducted by Aguayo et al. (2017) to determine the effects of four socio-demographic factors (age, sex, marital status, and number of children) on the burnout dimensions of police officers. The authors found that sex and age did not show any significant correlates with the development of burnout, but noted that occupation could have a significant effect on the results. The authors also concluded that systematic research on the relationship between socio-demographic factors and burnout has been somewhat lacking in the literature, leading to inconclusive results.

A meta-analysis of the burnout of educational workers (Alsalhe et al. 2021) found that age was a predictor of emotional exhaustion and lack of a sense of personal accomplishment, but not of depersonalisation. Additionally, the authors argue that gender correlates inconsistently with burnout. In some of the reviewed studies, males experienced higher levels of burnout, while other studies concluded that females experienced higher levels. This highlights that although males and females experience burnout differently, depending on the context, this relationship lacks general consistency. Marital status was found to be a predictor of burnout, primarily of emotional exhaustion and depersonalisation. Specifically, being single was found to be associated with higher levels of exhaustion, depersonalisation and overall burnout scale score. Educational background was found to influence burnout, as it tended to be a determinant of personal failure. It was found that the burnout level of postgraduate teachers was higher than that of graduate teachers. The higher a teacher's educational background, the greater their effort and therefore the greater their professional expectations are. It was argued that such a difference results from these expectations.

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2.   A persistent or recurring feeling of being detached from one's body or mental processes.

To conclude, the effects of socio-demographic characteristics appear to vary significantly between occupations. The work component of burnout and the major differences in the work context of occupations can explain this. For example, police officers experience work very differently from teachers, which may influence the role of socio-demographic factors in burnout.

4.   Causes and consequences

4.1   Causes

Many causes of burnout are identified in the literature. The most frequently cited theory to explain the causes (and consequences) of burnout is arguably Job Demands-Resources (JD-R) theory (Bakker and Demerouti 2017; Demerouti et al. 2001). According to the JD-R model, burnout results from two independent processes: a health impairment process and a (reduced) motivational process. The health impairment process departs from high or poorly 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 and Demerouti 2014), such as high workload, long work hours, or conflicts with colleagues. The motivational process departs from job resources, which are energising aspects of work that facilitate goal achievement and enable personal development (Bakker and Demerouti 2014), such as social support, developmental opportunities and task variety. Whereas the health impairment process is the core antecedent of exhaustion, the motivational process is the core antecedent of cynicism and disengagement.

Based on reviews and meta-analyses, it can be concluded that a high workload (work pressure, time pressure, work-home interference) and a lack of job resources (social support, feedback, autonomy) are among the most important factors that can cause burnout (Alarcon et al. 2009; Schaufeli and Bakker 2020). More specifically, a meta-analysis by Lee et al. (2011) found that job stress, over-involvement, control and professional identity significantly correlate with the dimensions of job burnout. In addition, job stress and over-involvement were most closely associated with emotional exhaustion. At the same time, the magnitudes of association for both control and professional identity were similar across the three dimensions of burnout. The authors argue that this indicates that job stress and over-involvement are different from the other antecedents. The findings are consistent with resources theory, in which job stress and over-involvement are considered job demands, while the other concepts are defined as job resources. This study also found a remarkable paradoxical effect of over-involvement in the sense that it can lead to significant exhaustion but also to a heightened perception of personal accomplishment. This means that over-involvement must be approached cautiously as initially it can be positive but may ultimately lead to job burnout.

After an overview of existing research regarding the antecedents of burnout, Bakker et al. (2023) argue that the causes of burnout can be categorised as

situational or individual. Situational factors occur in the employee's environment, whereas individual factors are part of a person, instilled into one's personality.

4.1.1 Situational factors

The balance between job demands and job resources plays a dominant role in causing exhaustion, depersonalisation and cynicism, and is thus an important driver of burnout.

Job demands such as role ambiguity, conflict and stress, as well as stressful events, workload and work pressure were found to lead to exhaustion and depersonalisation among human service providers in Lee and Ashforth's (1996) meta-analysis. Alarcon (2011) extended this meta-analysis to general occupations and highlighted the importance of job demands, job resources and organisational attitudes on developing job burnout. It was found that demands are significantly correlated with all dimensions of burnout. Furthermore, resources had a fairly consistent relationship with exhaustion and cynicism, but a stronger one with reduced (sense of) personal accomplishment. Moreover, organisational attitudes had a moderate to strong relationship to burnout. Longitudinal studies were built on previous meta-analyses and found that both job control and workplace support were negatively related to emotional exhaustion, while workload and job insecurity increased the risk of it (Aronsson et al. 2017).

4.1.2 Individual factors

A person's individual characteristics may manifest as a significant factor related to burnout. Extensive research has found that neurotic employees are more prone to experience burnout because they tend to focus on negative aspects based on a negative outlook rather than viewing events from a positive perspective. Emotional stability was thus found to be the most important predictor of exhaustion and depersonalisation. Other research has found that individual aspects, such as resilience, coping abilities and intrinsic motivation play an important role in protecting oneself from burnout. Hence, if these aspects are not present or insufficient, an individual may be prone to developing burnout. For example, a meta-analysis conducted by Shin et al. (2014) found that emotional exhaustion and depersonalisation are closely related to emotion-focused coping, whereas a reduced personal accomplishment is closely related to problem-focused coping. A meta-analysis conducted by Reichl et al. (2014) focused on the relationship between inter-role conflict, including work-to-nonwork conflict and nonwork-to-work conflict, and burnout. These types of conflict refer to a situation in which the demands of the work (home) domain make it difficult to participate in activities in the home (work) domain. The authors found strong correlations between both types of conflict and the burnout dimensions of emotional exhaustion and cynicism. The correlations were shown to be moderated differentially by gender, age, marital and parental status, as well as by cultural background. Another meta-analysis focusing on the relationship between job stressors and burnout reached an important conclusion (Guthier et al. 2020), namely that job stressors and burnout

mutually affect each other over time. This implies that, without intervention, it is possible to become trapped in a vicious cycle in which burnout reaches critical levels.

To conclude, the results of the various meta-analyses seem to suggest that job demands (job stressors, workload, cognitive, emotional, and physical demands, role conflict, role overload, role ambiguity, time pressure and long working hours, job insecurity, work–family conflict, stressful life events) are related to all burnout dimensions but more strongly to exhaustion, followed by cynicism. By contrast, job resources (control/autonomy, social support, rewards, developmental possibilities, communication, leadership) are weakly to moderately related to the burnout dimensions but, in particular, to personal accomplishment. Moreover, over-involvement, neuroticism, emotion-focused coping and a negative self-evaluation are related to exhaustion, followed by cynicism, whereas problem-focused coping and seeking social support have a stronger relationship to personal accomplishment. Note, however, that this research is generally cross-sectional and based on self-reports, which has evident limitations (Althubaiti 2016).

4.2   Consequences

A number of studies have investigated the consequences/effects of burnout syndrome. A meta-analysis by Lee et al. (2011) found that turnover intention and job satisfaction were closely correlated with all three dimensions of burnout. Specifically, the correlations with job satisfaction were stronger than with turnover intention. The authors argue, however, that the results could be unique to psychotherapists, as psychotherapists may have a pronounced obligation to their clients, thereby reducing the intention to quit. A study by Salvagioni et al. (2017) summarised job burnout's consequences and categorised them according to their physical, psychological or occupational nature. The findings are based on previous studies on the causes of burnout, meaning that the results are evidence-based. Table 3 shows the results of this literature review. Similar consequences were found by other studies, concluding that burnout affects employees in various ways and at different levels of severity and duration (Bakker et al. 2023).

Overall, burnout seems to be linked to physical, psychological and occupational outcomes. Although it might be difficult to be sure that burnout is the sole cause of, for example, obesity, it is indicative that burnout is linked to a broad range of outcomes, highlighting its detrimental role for individuals and, consequently, for organisations. On a more critical note, one might also assume that burnout and some of these consequences are reciprocal over time, for example, insomnia and burnout.

Table 3   Consequences of burnout

Physical consequences	Psychological consequences	Occupational consequences
Obesity Hyperlipidemia Type 2 diabetes* High Body Index Total cholesterol* Coronary heart disease* Cardiovascular disease* Musculoskeletal disorder Musculoskeletal pain* Changes in pain experiences (overall pain,* neck-shoulder pain,* back pain,* pain-related disability,* headache, pain in entire body, pain intensity and frequency Prolonged fatigue* Headaches,* respiratory infections,* and gastrointestinal problems* Severe injuries* Mortality below 45 years*	Insomnia,* changes in level of insomnia* Incidence of insomnia, persistence of insomnia, and sleep disturbances Depressive symptoms* Psychotropic and antidepressant treatment* Hospitalisation for mental disorders* Psychological ill-health symptoms*	Job dissatisfaction* Absenteeism* New disability pension* Job demands,* job resources* Presenteeism*

Note: * Significant findings.
Source: Salvagioni et al. (2017).

5.   Interventions

As burnout significantly influences the individual and the organisation, extensive research has been conducted on effective interventions to reduce and/or eliminate burnout and its symptoms. Interventions targeted at decreasing stress-related problems are usually classified as primary, secondary or tertiary, depending on their aim (Ahola et al. 2017). Primary interventions are aimed at reducing risk factors among all employees to prevent burnout from developing. Secondary interventions are aimed at preventing burnout from developing in a group of people at high risk of burnout. Tertiary interventions are aimed at treating employees who already suffer from burnout. In addition, interventions to treat burnout can be classified according to their target. Burnout interventions that focus on the individual are aimed at increasing employees' psychological resources and enhancing their ability to cope with stressors at work, which makes them more secondary or tertiary interventions. Interventions aimed at changing the occupational context and reducing the sources of stress are primary interventions.

5.1   Person-directed

Person-level interventions generally include cognitive behavioural therapy, mindfulness, psychosocial intervention training, psychotherapy, counselling, adaptive skill training, social support, relaxation exercises, recreational music making, coping strategies, psycho-education on stress and mental health, rational-emotive behaviour therapy, meditation, biofeedback, exercise, time management, social support education, mental imaging at home, and social skills (Bagnall et al. 2016).

A review of 25 primary intervention programmes by Awa et al. (2010) concludes that person-directed interventions (for example, cognitive behavioural training, psychotherapy, counselling, adaptive skill training, communication skills training, social support, relaxation exercises, or recreational music-making) reduced burnout in the short term (six months or less), while long-term results show that most effects diminish over time. The results are difficult to interpret because some studies only include a total burnout score, while others use individual scores for each burnout dimension. Nevertheless, it can be seen that psychosocial skill training not only reduces burnout overall but also improves all included dimensions. The same results are found for interventions to stimulate adaptive coping (that is, efforts to manage stressful conditions or associated emotional distress in a healthy and constructive manner such as active planning, positive reframing, and problem-solving), which result in a significant decrease in

emotional exhaustion and depersonalisation, and a significant increase in personal accomplishment. Adaptive coping also shows significantly positive results in both post-tests (> 6 months, > 1 year) and thus this type of intervention appears to be most effective in reducing all dimensions of burnout.

A study by Reeve et al. (2018) focused on determining the effectiveness of acceptance and commitment therapy (ACT) interventions in reducing burnout. This type of intervention aims to enhance a person's ability to behave in ways compatible with their personally chosen values, despite any unpleasant cognitive or emotional experiences. The meta-analysis found no pooled effect for ACT interventions reducing burnout relative to control. Similarly, no effect of ACT interventions on psychological flexibility was found. This is surprising as psychological flexibility (that is, the ability to undertake an activity that is personally meaningful despite obstacles) is a key ACT product. The authors did find that ACT interventions reduced psychological distress, however.

A meta-analysis by Maricuţoiu et al. (2016) of the effectiveness of person-directed interventions, such as cognitive behavioural therapy, relaxation, soft-skill interventions and hard-skill interventions with regard to employee burnout found that such interventions had a modest, but long-lasting effect on reducing burnout. Using a random-effects model, Maricuţoiu et al. (2016) found small overall effect sizes for the general level of burnout (d=.22, p<.05, k=13, overall N control=741, overall N intervention=747) and exhaustion (d=.17, p<.01, k=34, overall N control=1,120, overall N intervention=1,215), and not statistically significant effects for depersonalisation (d= .04, p>.05, k=31, overall N control=895, overall N intervention=888) and personal accomplishment (d=-.02, p>.05, k=29, overall N control=806, overall N intervention=817), with similar results during a follow-up check. The authors also point out that cognitive-behavioural interventions and interventions based on relaxation techniques are effective only for reducing emotional exhaustion. They argue that new types of intervention are needed to address depersonalisation and personal accomplishment.

Similar results were established in a meta-analysis by Iancu et al. (2018), which found slight effectiveness of interventions such as cognitive behavioural therapy, mindfulness, socio-emotional approach, psychoeducational approach, social support and professional development on emotional exhaustion and (sense of) personal accomplishment. Additionally, interventions based on mindfulness reported significant and homogeneous effects on exhaustion and personal accomplishment. In addition, mindfulness-based interventions also reported a small impact on depersonalisation.

Fendel et al. (2019) conducted a meta-analysis that also showed the positive effect of mindfulness-based interventions. Other approaches that had a significant impact were cognitive behavioural interventions (significant in the case of exhaustion) and interventions based on social support (significant effects in the case of personal accomplishment) (Iancu et al. 2018).

A meta-analysis of 35 years of intervention research in mental health found that interventions have a small but positive effect (Dreison et al. 2018). Specifically, the authors found that person-directed interventions were more effective than organisation-focused interventions in reducing emotional exhaustion and that job training/education was the most effective organisational intervention subtype. This meta-analysis was based on 27 samples, which included a total of 1,894 participants. The majority of participants were women (70.6%), Caucasian (72.7%) and had a graduate degree (59.7%), 11.8 (SD = 3.2) years of experience, and were employed as nurses (44.1%) or therapists (34.7%). Most burnout interventions were organisation-directed (70.4%), with job training/education being the most commonly reported subtype (44.4%). The most common person-directed intervention included in the study was the stress management workshop. Total intervention length varied considerably (range = 3 to 314 hours) and averaged 32.9 hours (SD = 46.6). Duration of intervention programmes also had significant variability, ranging from 1 day to 18 months. On average, interventions comprised 6.8 sessions (SD = 4.7).

5.2   Organisation-directed

Organisation-level interventions generally concern work process restructuring, work performance appraisals, work shift readjustments, job evaluation, participatory organisational intervention, job control, staff development training workshops, employee assistance programmes, co-worker support, job design and restructuring, enhanced care, critical incident stress management programmes, selection and placement of individual/role, physical and environmental characteristics, communication, stress management, management interventions, training for managers/supervisors, changes to workload and/or work schedule, psychosocial interventions and changing work practices (Bagnall et al. 2016).

A meta-analysis by Fernet et al. (2012) found that opportunities to exercise professional autonomy, feel connected with co-workers, and be psychologically rewarded foster the development of autonomous motivation. This, in turn, promotes commitment and prevents exhaustion, one of the main dimensions of burnout. The study concludes that autonomous motivation could be strengthened by enriching job design. De Simone et al. (2021) compared the effectiveness of individual-directed interventions vs organisation-directed interventions in reducing burnout scores among physicians. Individual-directed interventions comprised mindfulness-based stress reduction techniques, educational interventions targeting physicians' self-confidence and communication skills, exercise, or all these features. Organisation-directed interventions included workload interventions that focused on rescheduling hourly shifts and reducing workload, discussion meetings to enhance teamwork and leadership, structural changes, communication skills training, and mindfulness. The duration of the interventions ranged from two weeks to nine months. De Simone et al. (2021) showed that organisation-directed interventions were associated with a significant reduction in burnout score (SMD = −0.446; 95% CI, −0.619 to −0.274; $I2$ = 8%), while individual-directed interventions were associated with a small reduction in burnout score (SMD = −0.178; 95% CI, −0.322 to −0.035; $I2$ = 11%). Additionally,

the authors conclude that organisation-directed interventions were more effective in reducing depersonalisation than individual-directed interventions, and organisation-directed interventions were related to more improvement in personal accomplishment than individual-directed interventions.

Besides organisational interventions to reduce burnout levels, there are also interventions to help employees with high burnout return to their jobs. A prospective controlled study by Karlson et al. (2010) among employees/patients on long-term sick leave for clinical burnout found that a workplace-directed intervention, namely patient-supervisor communication, showed a linear increase in returns to work in the intervention group during the 18-month follow-up period, and 89% of subjects had returned to work to some extent by the end of the follow-up period. The increase in returns to work in the control group stopped after six months, and only 73% had returned to work to some extent by the end of the 18-month follow-up.

Recently, it was shown that organisation-led interventions aimed at training employees to improve their work characteristics (job demands and job resources) reduce burnout (Gordon et al. 2018). Such interventions (consisting of a workshop, implementation of job crafting goals, and an evaluative session) increase job crafting behaviours (seeking resources and challenges, optimising, or reducing demands) and consequently burnout. We still lack evidence of the long-term effects of such interventions, however.

5.3 Combined approach

Some studies combine individual and organisational-level interventions because both individual workers and organisations can make adjustments to reduce burnout risk. For example, individuals can undergo training to cope with job demands, while organisations could allow for job-crafting, thereby providing employees with the freedom to change components of the job. Below, we discuss the evidence on the effectiveness of interventions regarding burnout categorised according to type of intervention.

A meta-analysis by Awa et al. (2010) included six combined intervention programmes to investigate their effectiveness in reducing employee burnout. The first intervention was defined as professional supervision for psychiatric nurses, in which primary nurses were introduced to provide feedback and establish proper guidelines for working. In the second intervention, a work session was organised in which employees could share possible stressors that could cause burnout. In this way, several actions were identified: open meetings, work schedule improvement, performance appraisal, seminars and a 'buddy' system. The third combined intervention focused on implementing multidisciplinary structured work shift evaluations. Feedback training was provided to improve communication, and work shift evaluation leaders were appointed to supervise evaluations. The fourth intervention was defined as changes undertaken by the hospital to reduce adverse job psychosocial factors (that is, psychological demands, decision latitude, social support, and effort-reward imbalance). An intervention team proposed

solutions and objective changes were implemented to improve one of the four targeted psychosocial factors that were considered part of the intervention. The fifth intervention combined stress-management interventions and labour expert advice with cognitive behavioural therapy. The stress-management part of the intervention consisted of psycho-education on work stress, registration of symptoms and situations, relaxation, self-help books on rational emotive behaviour therapy, and time-management and writing assignments. The labour experts advised on work processes and how to lower the workload and job demands and increase the decision latitude, if necessary. The final intervention focused on communication, social and coping skills. In all cases, the interventions significantly decreased burnout (mainly exhaustion and depersonalisation). Intervention effects were found to diminish over time, however (6 months for person-directed interventions, 1 year for organisation-directed interventions, and 1+ years for combined interventions).

The effects of combined interventions are also highlighted in a systematic review and meta-analysis conducted by West et al. (2016). The authors found that combining individual-focused and organisation-focused intervention programmes helped reduce the dimensions of burnout among physicians. A meta-analysis by Pijpker et al. (2020) researched the effectiveness of 10 combined interventions and found that they led to more significant improvement in exhaustion and cynicism (or depersonalisation) in both the short-term (after 4 months) and the long-term (after 12 years) than in professional efficacy (or personal accomplishment). The combined interventions were all different in terms of content. More specifically, none of the studies evaluated the same person-directed and organisation-directed interventions. Interventions included dialogue meetings, staff support groups, job redesign, work schedule improvements, team building, stress management, workshops, and cognitive behavioural therapy. The duration and frequency of the interventions also differed across the studies, depending on the activities on which the interventions were based. For example, one study was based on three sessions of three hours each, while another was based on six monthly sessions of four hours. Multiple theoretical frameworks were used, with most focusing on job–person mismatch. Only one study used the Demand-Control-Support Model, whereas several studies did not report any theoretical framework. The few studies that included tests for mediators of change to explain how the combined intervention worked showed that involving employees in decision-making (for example, selecting stressors and mismatches) and enhancing their job control (decision authority over their jobs) and social support (such as positive feedback from supervisors), while eliminating stressors, explained the intervention's effectiveness. Based on these results, the authors suggest with caution that workplace health promotion practitioners are encouraged to facilitate the rehabilitation of burned-out employees by building job resources while eliminating stressors in the workplace.

5.4   Summary of evidence

As we saw in the studies mentioned above, the evidence suggests that interventions designed to reduce symptoms of burnout were conducted more often at an

individual than an organisational level (Bagnall et al. 2016). Individual-level interventions that were found to reduce burnout include staff training, workshops and cognitive behavioural programmes. Changing aspects of an organisation's culture and working practices generally included changes in workload or work behaviour, which appear to reduce stressors and factors that can lead to burnout and increase employee autonomy and social support. There is evidence to suggest that organisational interventions produce longer-lasting effects than individual approaches, suggesting that organisational interventions in the workplace may be more effective than individual ones. Not surprisingly, the review indicates that combined interventions are more effective than individual or organisational interventions alone. This also may be explained, however, by the fact that person-directed interventions seem to be mainly secondary or tertiary, whereas organisational-directed interventions could be categorised mainly as primary or secondary. In contrast to person-directed interventions, far fewer studies compare the effectiveness of organisation-directed interventions and combined person- and organisation-directed interventions. Two of the main reasons for this research imbalance are the complexity of conducting organisation-directed or combined interventions and the difficulty in evaluating their results (Awa et al. 2010; Walter et al. 2013). The effectiveness of these interventions (for example, supervision, work schedule reorganisation and CBT) was not often found to be long-lasting, and even then the effects diminished over time. The fact that the various studies followed different methodologies in terms of measurement instruments, duration of intervention and post-measures, whether or not the three dimensions of burnout were differentiated, and whether participants were randomly assigned to the control or intervention groups restricts the quality of the studies and comparison of the results.

5.5 Limitations and future research

5.5.1 Targeting interventions at burnout causes

Current research seems to focus more on the consequences of burnout, using techniques such as coping and stress management instead of changing the underlying causes of burnout. Interventions are developed mainly to enhance the employee's resources to enable them to better deal with high job demands. With person-directed interventions, it seems that employees are generally required to be fully responsible for their own causes and treatment of burnout. At the same time, organisational demands are seen as fixed and unalterable. This may explain why the effectiveness of interventions often diminishes over time, especially individual ones, as employees struggle to maintain strategies such as coping and stress management. This could cause them to develop burnout once again.

A central problem in the burnout literature is that interventions to prevent and reduce burnout effectively are often advocated, but rarely designed and studied. Most intervention studies 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. But because these interventions do not remove the causes of burnout, they do not qualify as practical solutions. Given the overwhelming evidence that burnout results from a combination of high job demands and low job resources, organisations should try to redesign their workplaces and optimise job characteristics (Demerouti et al. 2021). More primary interventions should be designed and tested instead of the secondary and tertiary interventions that dominate burnout intervention research. Adjusting job demands and job resources at the organisational level will improve the work engagement of all employees and safeguard against daily job stress and chronic burnout. Systematic research on how to conduct such primary interventions and how effective they are for various contexts and groups of employees is still lacking (Tetrick and Winslow 2015).

Combined interventions focusing on job redesign and collaborative efforts between organisation and employee to create jobs with well adapted characteristics seem most promising. The organisation's task is to create an environment with minimal stressors that facilitates effective employee functioning so that the employee can focus on individual intervention strategies, such as stress management, communication, coping and other related individual strategies.

5.5.2 Tailoring interventions to individual circumstances

As we saw in Section 1.4, there is a substantial overlap between burnout and mental health problems/disorders. This overlap makes it difficult to diagnose burnout and results in similar intervention and treatment approaches to alleviate various mental disorders which overlap somewhat in their symptoms. For instance, cognitive behavioural therapy is used to treat patients with depression and chronic fatigue. Although this may result in effective interventions as researchers and practitioners can borrow effective interventions from other mental health problems/disorders, it may also increase the risk that the interventions are not targeted to address burnout and its causes. Similarly, although we saw some socio-demographic differences in the experience of burnout, these differences are not considered when designing interventions tailored to specific socio-demographic groups. Future research is needed to determine the extent to which effective intervention varies between individuals with different job-related education levels and whether interventions can be made more effective by investigating target group–specific approaches (based on socio-demographic differences).

Another possible way forward suggested by Demerouti et al. (2021) is to build on recent evidence showing that those who score higher on burnout respond differently to short-term job demands and have more difficulty coping adaptively – for example, by using recovery and job crafting strategies. These findings further underline that interventions should be tailored to the employees involved (van Dam 2021). Specifically, van Dam (2021) argues that interventions should be adjusted to the various burnout risk profiles; those with mild stress symptoms could benefit from stress management programmes, whereas individuals with excessive perseverance may be better off with a healthy lifestyle programme. Future research could test possible individualised ways of optimising work context or job

design and compensate for work-related effort. This might involve combining proactive preventive approaches focused on the organisational environment and secondary management approaches directed at individuals. Combining individual and organisational level approaches includes a system change that adopts a participatory environment, promotes open communication, manager and peer support, a culture of learning, and successful employee participation in programme planning and implementation (Bagnall et al. 2016). Another possible solution might be to develop job crafting interventions for individuals scoring high on burnout with more attention to optimising demands and expanding job resources, and combine them with organisational interventions in which less strenuous work tasks are distributed to employees who are additionally trained to use alternative energy management, leisure crafting and recovery strategies. Organisations and management should try to target burnout interventions to the needs of individual groups.

5.5.3 Improving the evidence base

The present review highlights the need to improve the design and quality of interventions. Future studies should have longer observation periods to test their effects' sustainability. The gold standard of intervention research using pre-, post- and follow-up measures, randomised control trails, and many participants to guarantee sufficient statistical power is not often met (Ahola et al. 2017). Several studies included in the present review failed to differentiate between the three dimensions of burnout. Future studies should make such distinctions to better compare the effectiveness of different interventions with the same endpoints (Walter et al. 2013). Furthermore, it should be determined whether a target group-specific approach is needed to make interventions more effective (for example, differentiation according to age group, sex or educational background).

More complex interventions and the identification of practical interventional components are necessary. Hence, interventions should be developed based on solid theoretical grounds explaining what to change and how to change it to decrease burnout. Unfortunately, interventions often fail to test how particular effects on burnout reduction are caused; in other words, there is no test of the mediators that drive change. The review shows that the effectiveness of interventions is not spectacular; most interventions are, at best, effective in improving one burnout dimension. This means that either the interventions cannot address the causes or experience of burnout, or they are not delivered in an effective way, such that they produce the expected effects. In addition, we saw that the impact of interventions diminishes over time. One way to avoid this is to boost the positive impact of interventions by offering refresher sessions. To achieve these goals, it is necessary to conduct appropriate studies of high methodological quality and to report their methods and results in a comprehensive, clear and transparent manner (Walter et al. 2013). This might involve combining proactive preventive approaches focused on the organisational environment and secondary management approaches directed at individuals.

5.5.4   Towards a more holistic approach

Fitting the target of the intervention (individual, work tasks, work group, organisation) to the problem that needs to be solved (reducing burnout) shapes an intervention's process, outcomes and effectiveness (Raymond and Nielsen 2012). Because of the multiple factors contributing to the high risk of burnout, effective burnout interventions are likely to involve numerous actions. In line with this, Bakker et al. (2023) provide five recommendations that future research should incorporate to increase the effectiveness of interventions in preventing burnout (and promoting work engagement). First, organisations and their human resource departments may want to use HR practices that improve job demands and resources, including open communication and information sharing, initiatives to improve work-life balance, and opportunities for learning and development. Second, organisations may want to improve their psychosocial work climate or employees' shared perceptions of whether the management has developed and enacted policies, procedures and practices to protect employees' psychological health, well-being, and safety. Third, organisations need to monitor and optimise the design of their jobs continuously. Job redesign may take the form of participative interventions, in which representatives identify the most essential tasks and obstacles and generate ideas about optimising job demands and resources. Fourth, leaders may learn to facilitate the right job demands and resources or directly encourage proactive employee work behaviours (including job crafting). Fifth, individual-level interventions may take the form of individual job design interventions, job crafting and recovery training. Ideally, such interventions should be tailored to the burnout levels of individual employees. Such more holistic intervention programmes still need to be developed and evaluated, but may potentially diminish burnout and improve occupational health and well-being.

6.   Conclusion and policy recommendations

In this review, we showed that burnout is a fairly complex phenomenon that has attracted much scientific and societal attention. The WHO recognised burnout as an occupational phenomenon in the 11th revision of the International Categorization of Diseases (2019). Burnout now needs to be recognised as an occupational disease, but to that end the symptoms of burnout have to be clarified, and how they can be measured and diagnosed. Currently, the existing measurement instruments are not appropriate for diagnostic purposes, and their scores show substantial overlap with other disorders, such as fatigue, anxiety and depression. The literature seems to agree that a valid diagnosis of burnout requires a combination of a questionnaire (from a work and organisational point of view) and interview data (from a clinical point of view), as well as the integration of information about its causes. The latter is challenging, however, because psychosocial risks are also not clearly defined. The lack of a clear definition, measurement and diagnosis of burnout makes it difficult to specify a clear policy on preventing burnout and protecting and treating those who suffer from it. The review discovered that chronic exposure to high job demands and low job resources are the main triggers of burnout. Whereas individual characteristics (such as neuroticism) make some people more prone to burnout or to react to its triggers, there is no clear picture of what specific personality characteristics entail a higher risk of burnout. However, we did see that burnout causes various individual consequences, pointing to its detrimental effects for both individuals and organisations.

Burnout interventions typically focus on stress-relief and coping strategies to deal with the high perceived level of job demands. Intervention results show that the effects diminish over time, meaning that employees are again in danger of developing burnout as a result of increased stress levels. Research also shows that organisations focus primarily on the consequences of burnout, while more attention should be given to the underlying causes within the job. Evidence from organisational intervention research also shows that organisations can improve their employees' working conditions to reduce burnout risk. Moreover, they can provide a solid return-to-work plan that gives the employee some autonomy. Therefore, combined interventions show promise: they allow the organisation to develop a healthy work environment, while the employee can deal adequately with sporadic moments of stress. Social partners need to urge governments and policymakers to support research on burnout so that clear policies can be worked out on the diagnosis and treatment of burned-out employees. In addition, preventive measures must be taken to reduce the psychosocial risks in the work environment to minimise the risk of burnout.

References

Aguayo R., Vargas C., Cañadas G.R. and De la Fuente E.I. (2017) Are socio-demographic factors associated to burnout syndrome in police officers? A correlational meta-analysis, Anales de Psicologia, 33 (2), 383–392. https://doi.org/10.6018/analesps.33.2.260391

Ahola K., Toppinen-Tanner S. and Seppänen J. (2017) Interventions to alleviate burnout symptoms and to support return to work among employees with burnout: systematic review and meta-analysis, Burnout Research, 4, 1–11. https://doi.org/10.1016/j.burn.2017.02.001

Alarcon G., Eschleman K.J. and Bowling N.A. (2009) Relationships between personality variables and burnout: a meta-analysis, Work and Stress, 23 (3), 244–263. https://doi.org/10.1080/02678370903282600

Alarcon G.M. (2011) A meta-analysis of burnout with job demands, resources, and attitudes, Journal of Vocational Behavior, 79 (2), 549–562. https://doi.org/10.1016/j.jvb.2011.03.007

Alsalhe T.A., Chalghaf N., Guelmami N., Azaiez F. and Bragazzi N.L. (2021) occupational burnout prevalence and its determinants among physical education teachers: a systematic review and meta-analysis, Frontiers in Human Neuroscience, 15. https://doi.org/https://doi.org/10.3389/fnhum.2021.553230

Althubaiti A. (2016) Information bias in health research: definition, pitfalls, and adjustment methods, Journal of Multidisciplinary Healthcare, 9, 211–217. https://doi.org/10.2147/JMDH.S104807

Aronsson G., Theorell T., Grape T., Hammarström A., Hogstedt C., Marteinsdottir I., Skoog I., Träskman-Bendz L. and Hall C. (2017) A systematic review including meta-analysis of work environment and burnout symptoms, BMC Public Health, 17, 264. https://doi.org/10.1186/s12889-017-4153-7

Awa W.L., Plaumann M. and Walter U. (2010) Burnout prevention: a review of intervention programs, Patient Education and Counseling, 78 (2), 184–190. https://doi.org/10.1016/j.pec.2009.04.008

Bagnall A.-M., Jones R., Akter H. and Woodall J. (2016) Interventions to prevent burnout in high risk individuals: evidence review, Public Health England.

Bakker A.B. and Demerouti E. (2014) Job demands-resources theory, in Cooper C.L. (ed.) Wellbeing: a complete reference guide, John Wiley, 37–64. https://doi.org/10.1002/9781118539415.wbwell019

Bakker A.B. and Demerouti E. (2017) Job demands-resources theory: taking stock and looking forward, Journal of Occupational Health Psychology, 22 (3), 273–285. https://doi.org/10.1037/ocp0000056

Bakker A.B., Demerouti E. and Sanz-Vergel A. (2023) Job demands–resources theory: ten years later, Annual Review of Organizational Psychology and Organizational Behavior, 10, 25–53. https://doi.org/10.1146/annurev-orgpsych-120920-053933

Chen C. and Meier S.T. (2021) Burnout and depression in nurses: a systematic review and meta-analysis, International Journal of Nursing Studies, 124, 104099. https://doi.org/10.1016/j.ijnurstu.2021.104099

De Simone S., Vargas M. and Servillo G. (2021) Organizational strategies to reduce physician burnout: a systematic review and meta-analysis, Aging Clinical and Experimental Research, 33 (4), 883–894. https://doi.org/10.1007/s40520-019-01368-3

Demerouti E., Bakker A.B., Peeters M.C.W. and Breevaart K. (2021) New directions in burnout research, European Journal of Work and Organizational Psychology, 30 (5), 686–691. https://doi.org/10.1080/1359432X.2021.1979962

Demerouti E., Nachreiner F., Bakker A.B. and Schaufeli W.B. (2001) The job demand-resources model of burnout, Journal of Applied Psychology, 86 (3), 499–512. https://doi.org/https://doi.org/10.1037/0021-9010.86.3.499

Demerouti E. and Nachreiner F. (1998) Zur Spezifizität von Burnout für Dienstleistungsberufe: Fakt oder Artefakt [The specificity of burnout for human services: fact or artefact], Zeitschrift Für Arbeitswissenschaft, 52 (2), 82–88.

Dreison K.C., Bonfils K.A., Sliter M.T., McGrew J.H. and Salyers M.P. (2018) Job burnout in mental health providers: a meta-analysis of 35 years of intervention research, Journal of Occupational Health Psychology, 23 (1), 18-30. https://doi.org/10.1037/ocp0000047.supp

Edú-Valsania S., Laguía A. and Moriano J.A. (2022) Burnout: a review of theory and measurement, International Journal of Environmental Research and Public Health, 19 (3), 1780. https://doi.org/10.3390/ijerph19031780

Eurofound (2018) Burnout in the workplace: a review of data and policy responses in the EU, Publications Office. https://doi.org/10.2806/11497

Fendel J.C., Bürkle J.J. and Göritz A.S. (2019) Mindfulness-based interventions to reduce burnout and stress in physicians: a study protocol for a systematic review and meta-analysis, BMJ Open, 9 (11), e032295. https://doi.org/10.1136/bmjopen-2019-032295

Fernet C., Austin S. and Vallerand R.J. (2012) The effects of work motivation on employee exhaustion and commitment: an extension of the JD-R model, Work and Stress, 26 (3), 213–229. https://doi.org/10.1080/02678373.2012.713202

Freudenberger H. J. (1974) Staff burn-out, Journal of Social Issues, 30 (1), 159–165. https://doi.org/10.1111/j.1540-4560.1974.tb00706.x

Gordon H.J., Demerouti E., Le Blanc P.M., Bakker A.B., Bipp T. and Verhagen M.A.M.T. (2018) Individual job redesign: job crafting interventions in healthcare, Journal of Vocational Behavior, 104, 98–114. https://doi.org/10.1016/j.jvb.2017.07.002

Guseva Canu I. et al. (2021) Harmonized definition of occupational burnout: a systematic review, semantic analysis, and Delphi consensus in 29 countries, Scandinavian Journal of Work, Environment and Health, 47 (2), 95–107. https://doi.org/10.5271/sjweh.3935

Guthier C., Dormann C. and Voelkle M.C. (2020) Reciprocal effects between job stressors and burnout: a continuous time meta-analysis of longitudinal studies, Psychological Bulletin, 146 (12), 1146–1173. https://doi.org/10.1037/bul0000304

Iancu A.E., Rusu A., Măroiu C., Păcurar R. and Maricuoiu L.P. (2018) The effectiveness of interventions aimed at reducing teacher burnout: a meta-analysis, Educational Psychology Review, 30 (2), 373–396. https://doi.org/10.1007/s10648-017-9420-8

Karlson B., Jönsson P., Pålsson B., Åbjörnsson G., Malmberg B., Larsson B. and Österberg K. (2010) Return to work after a workplace-oriented intervention for patients on sick-leave for burnout-a prospective controlled study, BMC Public Health, 10, 301. http://www.biomedcentral.com/1471-2458/10/301

Kaschka W.P., Korczak D. and Broich K. (2011) Burnout: a fashionable diagnosis, Deutsches Arzteblatt International, 108 (46), 781–787. https://doi.org/10.3238/arztebl.2011.0781

Kleijweg J.H.M., Verbraak M.J.P.M. and Van Dijk M.K. (2013) Comparing the predictive utility of two screening tools for mental disorder among probationers, Psychological Assessment, 25 (2), 435–441. https://doi.org/10.1037/a0031334

Koutsimani P., Montgomery A. and Georganta K. (2019) The relationship between burnout, depression, and anxiety: a systematic review and meta-analysis, Frontiers in Psychology, 10. https://doi.org/10.3389/fpsyg.2019.00284

Lastovkova A., Carder M., Rasmussen H.M., Sjoberg L., De Groene G.J., Sauni R., Vevoda J., Vevodova S., Lasfargues G., Svartengren M., Varga M., Colosio C. and Pelclova D. (2018) Burnout syndrome as an occupational disease in the European Union: an exploratory study, Industrial Health, 56 (2), 160–165. https://doi.org/10.2486/indhealth.2017-0132

Lee J., Lim N., Yang E. and Lee S.M. (2011) Antecedents and consequences of three dimensions of burnout in psychotherapists: a meta-analysis, Professional Psychology: Research and Practice, 42 (3), 252–258. https://doi.org/10.1037/a0023319

Lee R.L. and Ashforth B.E. (1996) A meta-analytic examination of the correlates of the three dimensions of job burnout, Journal of Applied Psychology, 81 (2), 123–133. https://doi.org/10.1037/0021-9010.81.2.123

Maricuţoiu L.P., Sava F.A. and Butta O. (2016) The effectiveness of controlled interventions on employees' burnout: a meta-analysis, Journal of Occupational and Organizational Psychology, 89 (1), 1–27. https://doi.org/10.1111/joop.12099

Maslach C., Jackson S.E. and Leiter M. (1996) The Maslach Burnout Inventory Manual. https://www.researchgate.net/publication/277816643

Maslach C., Schaufeli W.B. and Leiter M.P. (2001) Job burnout, Annual Review of Psychology, 52, 397-422. https://doi.org/10.1146/annurev.psych.52.1.397

Maslach C. and Jackson S.E. (1981) The measurement of experienced burnout, Journal of Organizational Behavior, 2 (2), 99–113. https://doi.org/10.1002/job.4030020205

Meier S.T. and Kim S. (2022) Meta-regression analyses of relationships between burnout and depression with sampling and measurement methodological moderators, Journal of Occupational Health Psychology, 27 (2), 195-206. https://doi.org/10.1037/ocp0000273.supp

Nuallaong W. (2013) Burnout symptoms and cycles of burnout: the comparison with psychiatric disorders and aspects of approaches, in Bährer-Kohler S. (ed.) Burnout for experts: prevention in the context of living and working, Springer, 47-72. https://doi.org/10.1007/978-1-4614-4391-9

Pendell R. (2018) Millennials are burning out, Gallup, 19.07.2018.

Pijpker R., Vaandrager L., Veen E.J. and Koelen M.A. (2020) Combined interventions to reduce burnout complaints and promote return to work: a systematic review of effectiveness and mediators of change, International Journal of Environmental Research and Public Health, 17 (1), 55. https://doi.org/10.3390/ijerph17010055

Purvanova R.K. and Muros J.P. (2010) Gender differences in burnout: a meta-analysis, Journal of Vocational Behavior, 77 (2), 168–185. https://doi.org/10.1016/j.jvb.2010.04.006

Raymond R. and Nielsen K.M. (2012) Does the intervention fit? An explanatory model of intervention success and failure in complex organizational environments, in Biron C., Karanika-Murray M. and Cooper C. (eds.) Improving organizational interventions for stress and well-being: addressing process and context, Routledge, 120–134

Reeve A., Tickle A. and Moghaddam N. (2018) Are acceptance and commitment therapy-based interventions effective for reducing burnout in direct-care staff? A systematic review and meta-analysis, Mental Health Review Journal, 23 (3), 131–155. https://doi.org/10.1108/MHRJ-11-2017-0052

Reichl C., Leiter M.P. and Spinath F.M. (2014) Work–nonwork conflict and burnout: a meta-analysis, Human Relations, 67 (8), 979–1005. https://doi.org/10.1177/0018726713509857

Salvagioni D.A.J., Melanda F.N., Mesas A.E., González A.D., Gabani F.L. and de Andrade S.M. (2017) Physical, psychological and occupational consequences of job burnout: a systematic review of prospective studies, PloS ONE, 12 (10). https://doi.org/10.1371/journal.pone.0185781

Schaufeli W. (2018) Burnout in Europe: relations with national economy, governance and culture. https://www.wilmarschaufeli.nl/publications/Schaufeli/500.pdf

Schaufeli W.B., Desart S. and De Witte H. (2020) Burnout Assessment Tool (BAT): development, validity, and reliability, International Journal of Environmental Research and Public Health, 17 (24), 1–21. https://doi.org/10.3390/ijerph17249495

Schaufeli W.B., De Witte H., Hakanen J.J., Kaltiainen J. and Kok R. (2023) How to assess severe burnout? Cutoff points for the Burnout Assessment Tool (BAT) based on three European samples, Scandinavian Journal of Work, Environment and Health, 49 (4), 293-302. https://doi.org/10.5271/sjweh.4093

Schaufeli W. and Bakker A. (2020) Burnout en bevlogenheid [Burnout and work engagement], in Schaufeli W. and Bakker A. (eds.) De psychologie van arbeid en gezondheid, Bohn Stafleu van Loghum, 335-368. https://doi.org/10.1007/978-90-313-6556-2_17

Schaufeli W.B. and Taris T.W. (2005) The conceptualization and measurement of burnout: common ground and worlds apart, Work and Stress, 19 (3), 256–262.

Shin H., Park Y.M., Ying J.Y., Kim B., Noh H. and Lee S.M. (2014) Relationships between coping strategies and burnout symptoms: a meta-analytic approach, Professional Psychology: Research and Practice, 45 (1), 44–56. https://doi.org/10.1037/a0035220

Shirom A. and Melamed S. (2006) A comparison of the construct validity of two burnout measures in two groups of professionals, International Journal of Stress Management, 13 (2), 176–200. https://doi.org/10.1037/1072-5245.13.2.176

Tetrick L.E. and Winslow C.J. (2015) Workplace stress management interventions and health promotion, Annual Review of Organizational Psychology and Organizational Behavior, 2, 583-603. https://doi.org/10.1146/annurev-orgpsych-032414-111341

Toker S., Shirom A., Shapira I., Berliner S. and Melamed S. (2005) The association between burnout, depression, anxiety, and inflammation biomarkers: C-reactive protein and fibrinogen in men and women, Journal of Occupational Health Psychology, 10 (4), 344–362. https://doi.org/10.1037/1076-8998.10.4.344

Tricco A.C. et al. (2018) PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation, Annals of Internal Medicine, 169(7), 467-473. https://doi.org/10.7326/M18-0850

van Dam A. (2021) A clinical perspective on burnout: diagnosis, classification, and treatment of clinical burnout, European Journal of Work and Organizational Psychology, 30 (5), 732–741. https://doi.org/10.1080/1359432X.2021.1948400

Walter U., Plaumann M. and Krugmann C. (2013) Burnout interventions, in Bährer-Kohler S. (ed.) Burnout for experts: prevention in the context of living and working, Springer, 223–246.

West C.P., Dyrbye L.N., Erwin P.J. and Shanafelt T.D. (2016) Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis, The Lancet, 388 (10057), 2272–2281. https://doi.org/10.1016/S0140-6736(16)31279-X

WHO (2019) Burnout an 'occupational phenomenon': International Classification of Diseases, News, 29.05.2019. https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases

All links were checked on 11.12.2023.

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