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### Two sides of the same coin? On the history and phenomenology of chronic fatigue and burnout

Stephanie S. Leone <sup>a</sup>; Simon Wessely <sup>b</sup>; Marcus J. H. Huibers <sup>c</sup>; J. André Knottnerus <sup>d</sup>; IJmert Kant <sup>a</sup>

<sup>a</sup> Department of Epidemiology, Maastricht University, Maastricht, The Netherlands <sup>b</sup> Department of Psychological Medicine, Guy's, King's, and St Thomas' School of Medicine, Institute of Psychiatry, London, UK <sup>c</sup> Department of Clinical Psychological Science, Maastricht University, Maastricht, The Netherlands <sup>d</sup> Department of General Practice, Maastricht University, Maastricht, The Netherlands

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## Two sides of the same coin? On the history and phenomenology of chronic fatigue and burnout

Stephanie S. Leone<sup>a\*</sup>, Simon Wessely<sup>b</sup>, Marcus J.H. Huibers<sup>c</sup>,  
J. André Knottnerus<sup>d</sup> and IJmert Kant<sup>a</sup>

<sup>a</sup>Department of Epidemiology, Maastricht University, Maastricht, The Netherlands;

<sup>b</sup>Department of Psychological Medicine, Guy's, King's, and St Thomas' School of Medicine, Institute of Psychiatry, London, UK; <sup>c</sup>Department of Clinical Psychological Science, Maastricht University, Maastricht, The Netherlands; <sup>d</sup>Department of General Practice, Maastricht University, Maastricht, The Netherlands

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**Background:** Burnout and chronic fatigue syndrome (CFS) are two fatigue syndromes which have developed largely independently from each other, yet whose similarities in symptoms can be a source of confusion. We aim to explore the phenomenology of burnout and CFS in a historical context as this may provide some insight into the links and relationship between these conditions. **Method:** A narrative review based on literature in the fields of history, social science and medicine. **Results:** The origins of CFS lie within medicine, whereas burnout developed in a psychological setting. As well as symptoms, burnout and CFS also share similar themes such as an overload process triggering illness onset, the need for restoration of depleted energy, external causal attributions and the characteristics of people suffering from these illnesses. However, these themes are expressed in either psychological or medical terms according to the historical background. **Conclusion:** Despite their similarities, there have been few direct comparisons of the two concepts. Culture, illness perceptions and accountability are important issues in both conditions and could contribute to their differences. Comparing burnout and CFS within one sample frame, thus looking beyond the psychology/medicine divide, could be a useful first step towards understanding their relationship.

**Keywords:** chronic fatigue; burnout; history

### Introduction

Burnout and chronic fatigue syndrome (CFS) are two syndromes that both have fatigue as a core component, and that both are associated with sickness absence and work disability (Borritz, Rugulies, Christensen, Villadsen, & Kristensen, 2006; Huibers, Leone, Kant, & Knottnerus, 2006; Schaufeli & Enzman, 1998). Besides fatigue, there also seems to be an overlap in other symptoms such as depressed mood, muscle pains, nausea, headaches and flu like symptoms (Schaufeli & Enzman, 1998; Wessely, Hotopf, & Sharpe, 1998). In theory, these similarities ought to be a

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\*Corresponding author. Email: Stephanie.Leone@epid.unimaas.nl

cause of diagnostic confusion, and hence to have stimulated empirical research. However, in practice the two appear to exist in very different spheres so that few are aware of the overlap either academically or empirically. The two constructs appear to have developed largely independently of each other. At best, the similarities have been noted en passant in an introduction of a paper or thesis (De Vente, Olf, Van Amsterdam, Kamphuis, & Emmelkamp, 2003; Mommersteeg, 2006; Veldhuizen, 2003) or a paragraph in a book covering either burnout or CFS (Schaufeli & Enzman, 1998; Wessely et al., 1998) with few reflecting on the similarities and/or differences in more detail (Johannison, 2006; Shirom, Melamed, Toker, Berliner, & Shapira, 2005). In one of the few empirical studies on the subject, it was found that burnout and CFS seem to overlap to some extent as employees identified as being fatigued or meeting research criteria for CFS could also fulfil criteria for burnout (Huibers et al., 2003). Comparing CFS and burnout is relevant due to the simple fact that these labels exist, that people suffer from these conditions and that their diagnosis is confusing due to the seemingly similar symptoms (Weber & Jaekel-Reinhard, 2000).

The current essay is a narrative review on the phenomenology of CFS and burnout based on literature from the fields of history, social science and medicine. Exploring burnout and CFS in a historical context may provide some insight into the links and relationship between these conditions. Moreover, in a practical sense, it could provide a conceptual starting point to unravel these two fatigue syndromes. We will start with a brief history of the study and development of the concept of fatigue starting from the nineteenth century when the modern interest in fatigue was sparked.

### ***The discovery of fatigue: objective, subjective and abnormal***

Rabinbach (1990) has argued persuasively that the modern interest in the concept of fatigue was a product of the industrial revolution. The change in work behaviour, longer hours and more monotonous tasks, triggered a sudden preoccupation with the problem of fatigue. At first, this centred largely on the problems of loss of productivity due to fatigue, a process that became further accelerated with the invention of the assembly line. The parallel expansion in education, especially once it started to encompass both the rising middle and then lower classes, and also women, along with the emergent themes of the overstrain and degeneration of society, also led to increasing concerns about mental fatigue or 'surmenage' (Johannison, 2006; Nye, 1982; Rabinbach, 1990).

One of the first issues at hand was to define and measure fatigue. The dramatic increase in understanding and measurement of the function of the peripheral nervous system, using such devices as Mosso's ergograph, promised much (Mosso, 1904). For a while it seemed as though physiology would provide a system for the measurement and, ultimately, the management of fatigue and hence to achieve the desired goal of increased productivity in either the factory or the class room (Rabinbach, 1990). But whilst the objective measurement of fatigue as in neuromuscular disorders did prove successful, the same did not happen with the subjective sense of fatigue – indeed by the end of the nineteenth century it had become clear that these were two separate concepts (Berrios, 1990). The measurement of objective fatigue rarely coincided with the feeling of subjective fatigue.

The differences between the subjective and the objective became highlighted as fatigue also became of interest to doctors. This reached its apotheosis when the American neurologist George Beard introduced a new disease in 1869 which he labelled neurasthenia. Severe debilitating mental and physical fatigue arising after minimal effort was the hallmark of the new illness. With a deft blending of medical knowledge and social concern, Beard ascribed this new condition to a variety of social concerns, such as industrialisation, the rise of capitalism, the increase in working hours, and also the education of women, but couched it in the language of the new medicine and physiology, giving a spurious scientific authenticity that was accepted by many, but by no means all, of his contemporaries (Wessely, 1996). For Beard, neurasthenia was the result of both mental and physical overload, which might follow, for example, either a prolonged viral infection or, alternatively, an excessively demanding or pressured job. The result, however, was an organic depletion of nervous energy (Beard, 1869). Beard's neurasthenia combined features of both modern burnout and modern fatigue syndromes. With the arrival of neurasthenia, we see two notable changes. First, the inability of neurophysiologists to achieve the same understanding of fatigue in this new condition of nervous exhaustion as was being achieved elsewhere in neurology shifted the emphasis from seeing fatigue as purely objective and quantifiable to accepting the importance of the subjective feeling of fatigue. Second, neurasthenia signalled the interest of firstly medicine, and then later psychiatry, in fatigue, shifting away from being the concern solely of those dealing with productivity in the factory or the school. Fatigue had thus become abnormal rather than just an inconvenience or a hindrance to productivity.

### *Neurasthenia, CFS and burnout*

Several scholars have drawn links between neurasthenia and its modern counterpart of CFS (Abbey & Garfinkel, 1991; Greenberg, 1990; Wessely, 1990), but there are also striking similarities with burnout. Both burnout and neurasthenia are thought to be brought on by societal changes. Herbert Freudenberger, one of the first burnout researchers, noted that burnout was 'a demon, born of the society and times we live in and our ongoing struggle to invest our lives with meaning' (Freudenberger & Richelson, 1980) which could be applied directly to neurasthenia and Beard's time. Moreover, problematic work situations (e.g. overwork, monotonous work), which are thought to cause burnout (Schaufeli, 2003), have also always been associated with neurasthenia (Jewell, 1881; Johnson, 1875; Schwab, 1911; Wessely, 1991). However, the process by which they influence neurasthenia is different from burnout and more similar to CFS. This is directly related to the presumed cause of the condition: psychological or somatic. This will be discussed in more detail later, but for now it is important to emphasise that at its outset neurasthenia was explicitly a somatic condition, even if its causes reflected social concerns. It was only later as it proved difficult to define and objectively measure fatigue that neurasthenia moved from the somatic to the psychological domain (Dana, 1904; Taylor, 2001). This shift from somatic to psychological along with the fact that neurasthenia came to encompass so many things, which made it not very useful or specific as a diagnosis, caused interest in neurasthenia to wane (Lutz, 1996). After this time, it has been noted that fatigue was studied in different areas according

to its function or relevance (Johannison, 2006). Fatigue as relevant to work ended up in organisational or environmental medicine and psychology, whereas fatigue as relevant to a somatic process was assigned to medical fields such as virology or immunology (Johannison, 2006). Perhaps not surprisingly, these are the fields that correspond to the conditions of burnout and CFS, respectively.

### *Cause of fatigue: somatic or psychological?*

The 1980s saw the emergence of two syndromes in which fatigue played an important role: burnout and CFS. The concepts and definitions of both burnout and CFS are far from agreed upon but in general the former is widely regarded to be a work-related fatigue condition whereas the latter is seen as a more general fatigue condition. Both burnout and CFS can be viewed as conditions being at the far end of a continuum of severity and duration of (fatigue) symptoms (Lewis & Wessely, 1992; Schaufeli, Bakker, Hoogduin, Schaap, & Kladler, 2001). Rather than a state or condition (being burned out), burnout is actually often referred to as a process (burning out) with the end state of the burnout process referred to as 'clinical' burnout (Schaufeli et al., 2001). Despite ongoing discussion about the concepts of CFS and burnout, the definition of CFS as proposed by the Centers for Disease Control (also known as the CDC criteria for CFS) and of burnout as proposed by Maslach and Jackson are often used (Table 1) (Fukuda et al., 1994; Maslach, Schaufeli, & Leiter, 2001). From this table it is apparent that CFS is described in somatic terms whereas burnout is described in psychological terms. The historical development of these concepts may give some insight into this difference.

The development of the concept of CFS followed a medical path. Immunology and virology played an important role in shaping perspectives on CFS. The first case definition of CFS and the first use of the word in the modern medical literature can be traced to the 1988 CDC meeting which was attended almost exclusively by virologists and immunologists (Holmes et al., 1988). The term CFS was introduced

Table 1. Widely used definitions of CFS and burnout.

CDC definition for CFS	Maslach et al. definition for burnout
Severe and persisting fatigue lasting at least 6 months and which is not explained by an identifiable clinical cause or condition	A syndrome consisting of enhance feelings of exhaustion, cynicism and reduced feelings of professional efficacy.
AND	
Four or more of the following symptoms are present for at least 6 months:	– Exhaustion: Feelings of fatigue and/or exhaustion.
– Impaired memory or concentration	– Cynicism: Indifferent or distant attitude towards one's work
– Sore throat	– (Reduced) Professional efficacy:
– Tender cervical or axillary lymph nodes	(Negative) attitude towards one's own performance in relation to the job.
– Muscle pain	
– Multi-joint pain	
– New headaches	
– Unrefreshing sleep	
– Post-exertion malaise.	

in order to replace one of the previous labels, namely chronic mononucleosis or chronic Epstein Barr virus infection (Holmes et al., 1988). Moreover, other synonyms that achieved prominence at about the same time, such as myalgic encephalomyelitis (originally introduced in the United Kingdom in 1956, but which remained largely unheard of until the 1980s) and chronic fatigue and immune dysfunction syndrome (CFIDS) (Wessely et al., 1998) also reflect the strong medical roots of this condition.

Burnout on the other hand, followed a more psychological path. Initial work on burnout suggested that it affected mainly healthcare professionals due to chronic stress arising from strenuous interpersonal relationships at work (Freudenberger, 1974; Maslach & Jackson, 1981). This chronic stress depletes emotional and empathetic reserves leaving one to feel drained and weak or burned out. The work setting and factors related to it such as job demands, social support and occupational role ambiguity are considered to be important causal factors (Schaufeli, 2003).

From the beginning then, there is clear delineation between burnout and CFS in terms of their background and assumed cause: psychological and medical/somatic, respectively. Despite the difference in thinking about the cause and nature of both conditions, the initial symptoms associated with burnout and CFS were actually similar in their nature and magnitude: chronic fatigue, depressed mood, physical symptoms (e.g. muscle pains, nausea, headaches, flu-like symptoms) and disability (Schaufeli & Enzman, 1998; Wessely et al., 1998). As both burnout and CFS developed further, the line between being a psychological condition or a medical condition began to blur. As with neurasthenia, it proved difficult to find solid somatic underpinnings for CFS and psychological factors such as psychological distress, illness perceptions and causal attributions became the focus of interest in studies on CFS (Afari & Buchwald, 2003; Prins, van der Meer, & Bleijenberg, 2006). Likewise, the focus of study in burnout did not remain solely on psychological and occupational factors but also turned to physiological factors such as cortisol levels and immunological factors (Mommersteeg, Heijnen, Verbraak, & van Doornen, 2006; Shirom et al., 2005). Differences in background and research traditions make it difficult to make comparisons in a prognostic sense. Although prognosis has been the focus of study in CFS it has not been widely examined in burnout. Typically in burnout the focus has been on aetiology, correlates and consequences rather than on the course of burnout itself. This may reflect the lack of medicalisation of burnout which is discussed later in more detail. The prognosis of CFS has been found to be quite poor, especially without intervention (Afari & Buchwald, 2003; Prins et al., 2006). The few studies that have focused on the outcome of burnout indicate that burnout is stable in time (Shirom, 2005) and can become chronic when complaints are severe (Leone, Huibers, Knottnerus, & Kant, 2008).

Despite the differences in background, several common themes can be identified in the phenomenology of burnout and CFS as we will now discuss. Perhaps the quintessential difference here is that these themes are expressed in either psychological (i.e. burnout) or somatic (i.e. CFS) terms. A central theme of both burnout and CFS is that there is a lack of energy that needs to be restored in some way. The defence mechanisms to preserve energy in burnout and CFS also reflect their respective perceived psychological and somatic nature. Burnout sufferers withdraw psychologically from stressful situations by acquiring a cynical attitude towards



work (Angerer, 2003) whereas CFS sufferers withdraw physically and tend to reduce their activity out of fear it may cause more fatigue (Afari & Buchwald, 2003).

Another theme is the popular stereotypes of people affected by these illnesses: hardworking, dedicated, active people. One of the original and much derided sobriquets for CFS adopted by the media in the 1980s was 'yuppie flu', reflecting the stereotype of the hard working young urban professional who had 'burnt the candle at both ends' as it was often put, and then developed CFS in response. Even people in specific occupations, namely people in healthcare or helping professions, are assumed to be especially at risk of both burnout and CFS (Angerer, 2003; Taylor et al., 2003). In burnout it has been proposed that people in these professions are at risk due to the stressful interpersonal relationships between the healthcare professional and the client (Maslach et al., 2001). In CFS, however, it has been proposed that it could be due to an alleged increased exposure to certain infectious or viral agents in the work or school situation (Taylor et al., 2003). Empirical evidence paints a more nuanced picture of these assumptions as CFS and burnout have been found to affect a variety of individuals not simply the affluent professional (CFS has been found to be more prevalent among individuals from lower social classes (Ranjith, 2005)) or those working in healthcare and helping professions (Schaufeli & Taris, 2005).

The theme of overload is present in both burnout and CFS either in psychological terms (i.e. psychological overstrain) or medical terms (overload of the immune system). The process seems to be similar: a history of stressful events leading to overload which triggers the breakdown, either in terms of burnout or CFS (de Rijk, Schreurs, & Bensing, 1999; Terluin, Van der Klink, & Schaufeli, 2005). The theme of overload is especially important in popular or lay explanations of both burnout and CFS. Perhaps the single most common popular model for CFS is that of the body being overloaded by various insults, which might be infective, toxic or even stress related, which in turn depletes the body of 'energy', almost invariably acting by 'weakening the immune system', and which in turn leaves the person defenceless and exposed to new infections such as candida, or allergies and sensitivities (Wessely, 1994). The theme of overload is also an important lay explanation of burnout. In fact, the term 'burnout' itself is a metaphor for the process of overload and the subsequent energy depletion, not unlike 'a broken car battery that cannot be recharged and loses its power bit by bit' (Schaufeli & Enzman, 1998). Burnout as a metaphorical term adequately reflected the experience of sufferers and became a popular and powerful term among the lay public before it became of interest to researchers (Maslach et al., 2001).

The shift of neurasthenia from the neurological to the psychological was accompanied by considerable opposition from the original exponents of neurasthenia in the medical profession, who became increasingly isolated and derided by their colleagues (Wessely, 1990). In the modern era a similar shift in the formulations of CFS, with increasing emphasis on psychological factors rather than physical factors in the study of CFS has been accompanied by fierce resistance from CFS patient organisations (Barker, 2008; Travers & Lawler, 2008). The problem is not so much in the idea that psychological factors can play a part in the onset of CFS but rather that CFS itself is psychological (Ray et al., 1998). Psychological factors such as stress can be considered as increasing vulnerability to CFS (as explicitly acknowledged in most self help literature), but are not seen to be the actual cause (Clements, Sharpe, Simkin, Borrill, & Hawton, 1997). Rather, stress sets physical

responses in motion such as a weakening of the immune system (CFS) (Ray et al., 1998; Soderlund & Malterud, 2005) or previously the nervous system in neurasthenia (Gilbert, 1977). The idea that psychological means ‘all in the mind’, ‘not real’ or ‘your own fault’ (Dickson, Knussen, & Flowers, 2007; Ware, 1992) may partly explain this resistance. From the outset, burnout has been considered to be a psychological condition so that there has been no real need to struggle for it to be recognised as a somatic condition. Furthermore, the conflation of psychological aetiologies with guilt and blame has never been an issue with respect to burnout. More than likely, this does not have much to do with the distinction between a physical or psychological origin of illness per se, but with how either the illness itself (CFS versus burnout) or psychological disorders in general are perceived by the sufferer and other stakeholders. More specifically, it depends on what the perceived cause is and the implied accountability.

### *Illness perceptions, labelling and attributions*

Although burnout and CFS have different backgrounds, they do in a sense share the same attribution, namely an external one. As noted above, an important distinction between CFS and burnout is the avoidance of a psychological or psychiatric label. It has been argued that seeking a somatic illness label, as seen in functional somatic syndromes such as CFS, provides a guard against a psychiatric label for all sorts of reasons: the stigma attached to a psychiatric label, being perceived as a malingerer and the associated illness benefits (e.g. disability pensions) (Huibers & Wessely, 2006). So perceiving the cause to be somatic, in effect, places the blame and the cause of the illness firmly outside the self. Despite the fact that burnout is perceived to be a psychological condition, the label does not seem to carry with it the negative connotations of a psychiatric label which is probably partly due to the fact that the cause of burnout is seen as outside the self. It can be argued that the ‘success’ of burnout as a psychological illness depended on the blame being placed on the work situation and therefore outside the self (Johannison, 2006). In order for this to happen, work would have to be able to be blamed, which historically has not necessarily always been the case. Up until approximately the 1980s, illnesses arising from stress at work were not thought to be caused by work but rather by the temperament or personality of the individual. A report from the Industrial Health Research Board on nervous temperament, for example, suggests that employees interpret their mental discomfort as being caused by work or their work conditions, instead of realising that their mental states are subjective experiences (Culpin & Smith, 1930). Neurasthenia was thought to arise due to the inability of an individual personality to adapt to prevailing work conditions (Gilbert, 1977; White, 1917) and in military circles neurasthenia has been noted to indicate ‘unfitness or unwillingness for military service’ (Mott, 1919). The above implies that it is not the work that causes psychological illness but rather the employee’s personal characteristics and their inability to adapt. Moreover, this inability to adapt has also, rather derogatorily, been termed constitutional inferiority (Day, 1927; Wilbur, 1949). Thus in the first half of the last century all ‘neurotic disorders’ were seen as reflecting largely inherited or constitutional factors with little importance being placed on the actual trigger for illness – predisposition or vulnerability was what mattered. The introduction of post-traumatic stress disorder (PTSD) in 1980 signalled a dramatic shift in psychiatric thinking specifically in relation to trauma and illness,



but more generally across the field of the neuroses (a term that was then abandoned in the DSM). So there was a shift in placing the blame or responsibility on the individual to placing it on an external (work) stressor, made explicit in the new category of PTSD as it emerged in the DSM-III in 1980 (Jones & Wessely, 2007).

Despite both conditions having an external attribution there is an important difference between burnout and CFS. The cause is 'known' in burnout (i.e. work) and 'unknown' in CFS which can lead to considerable uncertainty and the continued speculation regarding the cause. Moreover, perceptions about the cause of CFS have consistently been shown to influence the prognosis of this illness, especially, when patients attribute CFS to somatic causes the course can be negatively influenced (Afari & Buchwald, 2003). As mentioned earlier, the focus in burnout research has generally been on aetiology rather than course and prognosis (Schaufeli & Enzman, 1998). Relatively little is known about which factors influence the course of burnout including possible illness attributions. However there is some evidence that suggests that burnout and CFS differ with respect to attributions; psychological attributions being more related to burnout and somatic attributions being more related to CFS (Huibers et al., 2003).

A related aspect of illness labels is the fight for an officially recognised label. In this respect, CFS and burnout also differ as this recognition is an important goal for CFS patients and patient organisations to achieve, whereas organised activism has not been an important issue in burnout. It has been noted that part of the reason the term burnout became so popular is that it was a socially acceptable and non-stigmatising label for being temporarily overworked. In other words burnout was not medicalised (Maslach & Schaufeli, 1993; Schaufeli, 2007). Even today, there are only a few countries in which burnout is considered and treated as a diagnostic entity with all its related benefits (Schaufeli, 2007).

This raises the important issue of the role society and culture play in shaping and forming illnesses. That is, the same set of symptoms may attract different labels in different eras, countries and cultures (Barsky & Borus, 1999). For example, although burnout is a widely accepted and recognised label in the Netherlands and Sweden this is true to a lesser extent for the UK where other labels for a similar set of symptoms may be used (e.g. work stress or depression). There are a number of possible reasons for accepting or refuting a certain diagnosis including the prevailing welfare system, beliefs held by clinicians, beliefs held by patients, and the cultural acceptance of psychological or somatic labels (Wessely et al., 1998). Due to the uncertain nature of CFS and the psychological versus somatic debate, some CFS patients tend to feel that their illness and suffering is not legitimised and recognised by society (Ware, 1992). The most important function of an illness label is that it provides a cause for symptoms and also recognition that something is wrong. However, in some instances the label given to a condition can cause more harm than good. In whiplash it has been noted that some patients can become more disabled by the diagnosis (or at least its implications) than by the injury (Malleon, 2002). The same phenomenon has been noted in CFS and indeed many other conditions (Hamilton, Gallagher, Thomas, & White, 2005; Huibers & Wessely, 2006).

### *Specificity of a construct*

An ongoing discussion in both the CFS and the burnout literature is the conceptualisation of these constructs. A specific issue is whether burnout and CFS

are distinct from other conditions, most notably depression (Afari & Buchwald, 2003; Glass & Mcknight, 1996; Iacovides, Fountoulakis, Kaprinis, & Kaprinis, 2003; Moss Morris & Petrie, 2001). Burnout and CFS have had to fight for a place within their own respective territories with CFS having to be differentiated from other unexplained medical syndromes (e.g. irritable bowel syndrome and fibromyalgia) and burnout from other occupational health constructs (e.g. work stress and job satisfaction) (Afari & Buchwald, 2003; Schaufeli & Buunk, 2002).

Interestingly enough, the issue of whether burnout and CFS are different from each other has not received as much attention. Distinguishing between burnout and CFS may be difficult because of the overlap in symptoms and course of illness (Weber & Jaekel-Reinhard, 2000). In view of the previous paragraph this raises the question of how a distinction is made between these conditions and why some – patients and healthcare providers – opt for the label CFS whereas others opt for burnout. Unfortunately little is known on this topic, but a starting point may be the emphasis that is placed on the ‘somatic’ nature of symptoms in CFS and the work-related nature of burnout (Schaufeli & Enzman, 1998). The perceived cause of the complaints (work or an unexplained underlying medical condition) is one of the most, if not the most, distinguishing features between burnout and CFS. In line with work on the diagnosis of CFS (Cho, Menezes, Bhugra, & Wessely, 2008; Jason, Taylor, Pliplys, Stepanek, & Shlaes, 2002), factors influencing how comfortable patients and healthcare professional are with the label of burnout or CFS could, for example, include the familiarity with both concepts, the attitudes to both concepts, the acceptance of psychological problems as a legitimate cause of illness and – as burnout is work-related – the importance of occupational (mental) healthcare. It would be interesting to learn about how patients and healthcare providers perceive burnout and CFS and how they distinguish between them in both a clinical and socio-cultural sense.

Besides having to distinguish themselves from other conditions, there has been considerable debate about the conceptualisation of the conditions themselves. In CFS this is, among others, reflected by different (cross-cultural) sets of diagnostic criteria for CFS and the difficulties in classification arising from the somatic/psychological debate surrounding CFS (Health Council of the Netherlands, 2005; Jason, Helgerson, Torres-Harding, Carrico, & Taylor, 2003; Wessely, 2001).

The confusion surrounding fatigue diagnoses is also reflected in their classification in various classification systems (Table 2). Most clinicians consider ME and CFS to be synonymous, with the one being preferred in the media/vernacular but the other dominating the professional/scientific literature, but the ICD-10 uneasily classifies the former under neurology and the latter (with neurasthenia as a synonym) under psychiatry (David & Wessely, 1993), despite the clear and obvious similarities of the clinical descriptions. The Dutch classification for occupational health and social insurance physicians (CAS) classifies CFS as a central nervous system disorder and ME as a nervous system disorder implying a more specific cause or nature of CFS compared to ME (<http://cba.uwv.nl/cba/opencms/CBA/module4/80/01.htm>). Burnout is seen as a disorder in the CAS system, but it is seen as a life management problem in the ICD-10. The DSM-IV does not mention these conditions at all, but the concepts/descriptions imply that they belong within the somatoform disorder category, not least because nearly every patient will fulfil criteria for the unsatisfactory and largely ignored category of undifferentiated somatoform disorder.

Table 2. Classification of fatigue conditions in various classification systems.

	ICD-10 <sup>a</sup>	CAS <sup>b</sup>	DSM-IV <sup>c</sup>
Burnout	Problems related to life management difficulty	Adjustment disorder	No classification
CFS	Psychiatry (other neurotic disorders)	Neurology (other <i>central</i> nervous system disorders)	No classification
ME	Neurology (other disorders)	Neurology (other diseases of the nervous system)	No classification
Neurasthenia	Psychiatry (other neurotic disorders)	Psychiatry (other psychological disorders)	No classification

Notes: <sup>a</sup>International classification of diseases.

<sup>b</sup>Dutch classifications for occupational health and social insurance physicians.

<sup>c</sup>Diagnostic and statistical manual of mental disorders.

The reader might be confused by the preceding paragraph, and rightly so. The classification of CFS, burnout and indeed other overlapping syndromes is a nosological and political minefield, and it is not for nothing that perhaps the central focus of CFS activism is around the issue of labels and classifications, an issue that has been largely ignored in the professional/scientific literature.

Regarding the conceptualisation of burnout, the main focus has been on two aspects: is it more than prolonged or chronic fatigue and is it solely work-related (Kristensen, Borritz, Villadsen, & Christensen, 2005; Schaufeli & Taris, 2005; Shirom, 2005)? In CFS the principal arguments and fault lines, at least in the popular debate, concerns the vexed issue of 'physical' versus 'psychological' aetiology, in burnout the issue is more work versus non work. Whereas some see burnout as only a work-related condition, others feel it can be generalised to other areas of life as well (Kristensen et al., 2005; Schaufeli & Enzman, 1998). Moreover, several researchers have argued that fatigue and exhaustion are the main elements of burnout and have defined burnout around this central feature alone instead of including the psychological withdrawal and professional efficacy components of burnout (Schaufeli & Enzman, 1998; Shirom et al., 2005). However, the usefulness of extending the concept of burnout beyond the work situation and reducing it to just the fatigue or exhaustion element has been questioned as it would become non-specific and coincide with the concept of fatigue which is not domain specific: 'when burnout is identical to fatigue, the term is redundant...' (Schaufeli & Taris, 2005). An interesting fact in this respect, is that studies on burnout in clinical samples have actually used the ICD-10 criteria for neurasthenia to define burnout, provided that it was work-related (Schaufeli et al., 2001; Sonnenschein, Sorbi, Doornen, Schaufeli, & Maas, 2007). If the work-relatedness was left out of the equation then burnout would indeed equate to CFS or fatigue, not least given the 96% overlap between CFS and neurasthenia, for example, reported from one CFS clinic (Farmer et al., 1995).

## Conclusion

Burnout and CFS are two conditions which come from different backgrounds, are conceptualised differently and are generally thought to be separate conditions (Schaufeli & Enzman, 1998; Wessely et al., 1998). In this essay, we explored several themes related to the phenomenology of burnout and CFS and found that the similarities between these conditions occur at more than just the symptom level. Similarities exist on such themes as the so-called 'overload' as a triggering factor, the need for restoration of depleted energy, external causal attributions, the characteristics of people suffering from these conditions, and the classification and distinction of these conditions. This causes the presumed differences to become a little unclear. It is striking that the main differences appear to be related to the perceived cause of the conditions (related to the historical development and background of burnout and CFS), in particular the somatic or psychological cause, and not so much to the phenomenology of the conditions themselves. Even though the main symptom(s) are so close, the perception of these symptoms is different and could consequently make the conditions different. Our findings suggest that culture, illness perceptions and accountability are important issues in both burnout and CFS as they give meaning to a certain set of symptoms and shape the diagnoses that were embraced by those

suffering from these symptoms. This should be kept in mind when comparing these conditions. As was previously demonstrated for CFS (Abbey & Garfinkel, 1991; Barsky & Borus, 1999), burnout too is also a compelling illustration of how illness is shaped by culture and society.

In a sense, the conclusion of this essay could be that, irrespective of 'objective' findings, burnout and CFS are different simply because they are perceived to be different. It is important however, to realise that perceptions and even assumptions surrounding burnout and CFS may have actually hampered a comparison of these conditions. It can, for example, be assumed that they are different based on the somatic/psychological divide or that they are the same due to the similar symptoms. However, the validity of such assumptions will never be known if burnout and CFS are not compared empirically. At this moment it is difficult to compare the results from separate studies on burnout and CFS as the emphasis and approach to their study is, quite naturally, influenced by perceptions shaped by their respective backgrounds.

So does all this talk about perceptions mean that different labels are being given to the same set of symptoms? Although this issue deserves further research, it is not unlikely that the proposed differences between burnout and CFS may be more assumed than real. And paradoxically, some of the so-called differences may actually be similarities, while similarities may also really be differences. One way of resolving the dilemma is to prospectively compare burnout and CFS in one sample in which both conditions have been measured along with factors that could influence both burnout and CFS, such as those noted in this essay (e.g. illness perceptions). This may provide the key to understanding the relationship between CFS and burnout.

## References

- Abbey, S.E., & Garfinkel, P.E. (1991). Neurasthenia and chronic fatigue syndrome: The role of culture in the making of a diagnosis. *American Journal of Psychiatry*, *148*(12), 1638–1646.
- Afari, N., & Buchwald, D. (2003). Chronic fatigue syndrome: A review. *American Journal of Psychiatry*, *160*(2), 221–236.
- Angerer, J.M. (2003). Job burnout. *Journal of Employment Counseling*, *40*(3), 98–107.
- Barker, K.K. (2008). Electronic support groups, patient-consumers, and medicalization: The case of contested illness. *Journal of Health and Social Behaviour*, *49*(1), 20–36.
- Barsky, A.J., & Borus, J.F. (1999). Functional somatic syndromes. *Annals of Internal Medicine*, *130*(11), 910–921.
- Beard, G. (1869). Neurasthenia or nervous exhaustion. *Boston Medical and Surgical Journal*, *3*(13), 217–221.
- Berrios, G.E. (1990). Feelings of fatigue and psychopathology – A conceptual history. *Comprehensive Psychiatry*, *31*(2), 140–151.
- Borritz, M., Rugulies, R., Christensen, K.B., Villadsen, E., & Kristensen, T.S. (2006). Burnout as a predictor of self-reported sickness absence among human service workers: Prospective findings from three year follow up of the PUMA study. *Occupational and Environmental Medicine*, *63*(2), 98–106.
- Cho, H.J., Menezes, P.R., Bhugra, D., & Wessely, S. (2008). The awareness of chronic fatigue syndrome: A comparative study in Brazil and the United Kingdom. *Journal of Psychosomatic Research*, *64*(4), 351–355.

- Clements, A., Sharpe, M., Simkin, S., Borrill, J., & Hawton, K. (1997). Chronic fatigue syndrome: A qualitative investigation of patients' beliefs about the illness. *Journal of Psychosomatic Research, 42*(6), 615–624.
- Culpin, M., & Smith, M. (1930). *The nervous temperament*. (Rep. 61) London: Industrial Health Research Board Report.
- Dana, C.L. (1904). The partial passing of neurasthenia. *Boston Medical and Surgical Journal, 60*, 339–344.
- David, A., & Wessely, S. (1993). Chronic fatigue, ME, and ICD-10. *Lancet, 342*(8881), 1247–1248.
- Day, L.W. (1927). Study of the last one hundred cases diagnosed as neurasthenia discharged from United States veterans' hospital, Perry Point, MD. *U.S. Veterans' Bureau Medical Bulletin, 3*(6), 559–573.
- de Rijk, A.E., Schreurs, K.M., & Bensing, J.M. (1999). What is behind "I'm so tired"? Fatigue experiences and their relations to the quality and quantity of external stimulation. *Journal of Psychosomatic Research, 47*(6), 509–523.
- De Vente, W., Olf, M., Van Amsterdam, J.G., Kamphuis, J.H., & Emmelkamp, P.M. (2003). Physiological differences between burnout patients and healthy controls: Blood pressure, heart rate, and cortisol responses. *Occupational and Environmental Medicine, 60*(Suppl. 1), i54–61.
- Dickson, A., Knussen, C., & Flowers, P. (2007). Stigma and the delegitimation experience: An interpretive phenomenological analysis of people living with chronic fatigue syndrome. *Psychology and Health, 22*(7), 851–867.
- Farmer, A., Jones, I., Hillier, J., Llewelyn, M., Borysiewicz, L., & Smith, A. (1995). Neuraesthesia revisited: ICD-10 and DSM-III-R psychiatric syndromes in chronic fatigue patients and comparison subjects. *British Journal of Psychiatry, 167*(4), 503–506.
- Freudenberger, H.J. (1974). Staff burn-out. *Journal of Social Issues, 30*(1), 159–165.
- Freudenberger, H.J., & Richelson, G. (1980). *Burn-out: The high cost of high achievement*. New York: Bantam Books Inc.
- Fukuda, K., Straus, S.E., Hickie, I., Sharpe, M.C., Dobbins, J.G., & Komaroff, A. (1994). The chronic fatigue syndrome: A comprehensive approach to its definition and study. *International Chronic Fatigue Syndrome Study Group. Annals of Internal Medicine, 121*(12), 953–959.
- Gilbert, J.B. (1977). *Work without salvation: America's intellectuals and industrial alienation, 1880–1910*. Baltimore: John Hopkins University Press.
- Glass, D.C., & Mcknight, J.D. (1996). Perceived control, depressive symptomatology, and professional burnout: A review of the evidence. *Psychology & Health, 11*(1), 23–48.
- Greenberg, D.B. (1990). Neurasthenia in the 1980s: Chronic mononucleosis, chronic fatigue syndrome, and anxiety and depressive disorders. *Psychosomatics, 31*(2), 129–137.
- Hamilton, W.T., Gallagher, A.M., Thomas, J.M., & White, P.D. (2005). The prognosis of different fatigue diagnostic labels: A longitudinal survey. *Family Practice, 22*(4), 383–388.
- Health Council of the Netherlands. (2005). *Het chronische-vermoeidheidssyndroom [Chronic fatigue syndrome]*. Den Haag: Health Council of the Netherlands.
- Holmes, G.P., Kaplan, J.E., Gantz, N.M., Komaroff, A.L., Schonberger, L.B., Straus, S.E., et al. (1988). Chronic fatigue syndrome: A working case definition. *Annals of Internal Medicine, 108*(3), 387–389.
- Huibers, M., Beurskens, A.J.H.M., Prins, J.B., Kant, I.J., Bazelmans, E., van Schayck, C.P., et al. (2003). Fatigue, burnout, and chronic fatigue syndrome among employees on sick leave: Do attributions make the difference? *Occupational and Environmental Medicine, 60*, 26–31.
- Huibers, M., Leone, S.S., Kant, I.J., & Knottnerus, J.A. (2006). Chronic fatigue syndrome-like caseness as a predictor of work status in fatigued employees on sick leave: Four year follow up study. *Occupational and Environmental Medicine, 63*(8), 570–572.



- Huibers, M., & Wessely, S. (2006). The act of diagnosis: Pros and cons of labelling chronic fatigue syndrome. *Psychological Medicine*, 36(7), 895–900.
- Iacovides, A., Fountoulakis, K.N., Kaprinis, S., & Kaprinis, G. (2003). The relationship between job stress, burnout and clinical depression. *Journal of Affective Disorders*, 75(3), 209–221.
- Jason, L.A., Helgeson, J., Torres-Harding, S.R., Carrico, A.W., & Taylor, R.R. (2003). Variability in diagnostic criteria for chronic fatigue syndrome may result in substantial differences in patterns of symptoms and disability. *Evaluation & the Health Professions*, 26(1), 3–22.
- Jason, L.A., Taylor, R.R., Plioplys, S., Stepanek, Z., & Shlaes, J. (2002). Evaluating attributions for an illness based upon the name: Chronic fatigue syndrome, myalgic encephalopathy and Florence Nightingale disease. *American Journal of Community Psychology*, 30(1), 133–148.
- Jewell, J. (1881). Influence of our present civilization in the production of nervous and mental disease. *Journal of Nervous and Mental Disease*, 8, 1–24.
- Johannison, K. (2006). Modern fatigue: A historical perspective. In B. Arnetz, & R. Ekman (Eds.), *Stress in Health and Disease* (pp. 3–19). Weinheim: Wiley-VCH.
- Johnson, G. (1875). Nervous disorders that result from overwork and mental anxiety. *The Lancet*, 106, 85–87.
- Jones, E., & Wessely, S. (2007). A paradigm shift in the conceptualization of psychological trauma in the 20th century. *Journal of Anxiety Disorders*, 21(2), 164–175.
- Kristensen, T.S., Borritz, M., Villadsen, E., & Christensen, K.B. (2005). The Copenhagen burnout inventory: A new tool for the assessment of burnout. *Work and Stress*, 19(3), 192–207.
- Leone, S.S., Huibers, M.J., Knottnerus, J.A., & Kant, I. (2008). A comparison of the course of burnout and prolonged fatigue: A 4-year prospective cohort study. *Journal of Psychosomatic Research*, 65(1), 31–38.
- Lewis, G., & Wessely, S. (1992). The epidemiology of fatigue: more questions than answers. *Journal of Epidemiology and Community Health*, 46(2), 92–97.
- Lutz, T. (1996). Neurasthenia and fatigue syndromes. In G. Berrios, & R. Porter (Eds.), *A History of clinical psychiatry: The origin and history of psychiatric disorders* (pp. 532–544). London: Athlone.
- Malleson, A. (2002). *Whiplash and other useful illnesses*. Montreal: McGill-Queen's University Press.
- Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99–113.
- Maslach, C., & Schaufeli, W.B. (1993). Historical and conceptual development of burnout. In W.B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*. New York: Taylor & Francis.
- Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- Mommersteeg, P. (2006). *The psychophysiology of burnout*. PhD thesis, Utrecht University.
- Mommersteeg, P., Heijnen, C.J., Verbraak, M.J., & van Doornen, L.J. (2006). A longitudinal study on cortisol and complaint reduction in burnout. *Psychoneuroendocrinology*, 31(7), 793–804.
- Moss Morris, R., & Petrie, K.J. (2001). Discriminating between chronic fatigue syndrome and depression: A cognitive analysis. *Psychological medicine*, 31(3), 469–479.
- Mosso, A. (1904). *Fatigue*. London: Swan Sonnenschein and Co.
- Mott, F.W. (1919). *War neuroses and shell shock*. London: Henry Frowde.
- Nye, R.A. (1982). Degeneration, neurasthenia and the culture of sport in Belle Epoque France. *Journal of Contemporary History*, 17, 51–68.
- Prins, J.B., van der Meer, J.W., & Bleijenberg, G. (2006). Chronic fatigue syndrome. *Lancet*, 367(9507), 346–355.

- Rabinbach, A. (1990). *The human motor: Energy, fatigue, and the origins of modernity*. New York: Basic Books, Inc.
- Ranjith, G. (2005). Epidemiology of chronic fatigue syndrome. *Occupational Medicine (London)*, 55(1), 13–19.
- Ray, C., Jeffeues, S., Weir, W., Hayes, K., Simon, S., Akingbade, F., et al. (1998). Making sense of chronic fatigue syndrome: Patients' accounts of onset. *Psychology & Health*, 13(1), 99–109.
- Schaufeli, W. (2003). Past performance and future perspectives of burnout research. *South African Journal of Industrial Psychology*, 29(4), 1–15.
- Schaufeli, W. (2007). Burnout in discussie: Stand van zaken [Burnout discussed: Current state of affairs]. *De Psycholoog*, 42, 534–540.
- Schaufeli, W., Bakker, A.B., Hoogduin, K., Schaap, C., & Kladler, A. (2001). On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychology & Health*, 16(5), 565–582.
- Schaufeli, W., & Buunk, B.P. (2002). Burnout: An overview of 25 years of research and theorizing. In M.J. Schabracq, J.A.M. Winnubst, & C.L. Cooper (Eds.), *The handbook of work and health psychology*. Chichester: Wiley.
- Schaufeli, W., & Enzman, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.
- Schaufeli, W., & Taris, T.W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work and Stress*, 19(3), 256–262.
- Schwab, S.I. (1911). Neurasthenia among garment workers. *American Economic Review*, 1, 265–270.
- Shirom, A. (2005). Reflections on the study of burnout. *Work and Stress*, 19(3), 263–270.
- Shirom, A., Melamed, S., Toker, S., Berliner, S., & Shapira, I. (2005). Burnout and health: Current knowledge and future research directions. In G. Hodgkinson, & F. Kevin (Eds.), *International review of industrial and organizational psychology* (pp. 269–309). New York: Wiley.
- Soderlund, A., & Malterud, K. (2005). Why did I get chronic fatigue syndrome? A qualitative interview study of causal attributions in women patients. *Scandinavian Journal of Primary Health Care*, 23(4), 242–247.
- Sonnenschein, M., Sorbi, M.J., Doornen, L.J.P.V., Schaufeli, W.B., & Maas, C.J.M. (2007). Electronic diary evidence on energy erosion in clinical burnout. *Journal of Occupational Health Psychology*, 12(4), 402–413.
- Taylor, R.E. (2001). Death of neurasthenia and its psychological reincarnation: A study of neurasthenia at the National Hospital for the Relief and Cure of the Paralyzed and Epileptic, Queen Square, London, 1870–1932. *British Journal of Psychiatry*, 179, 550–557.
- Taylor, R.R., Jason, L.A., Richman, J.A., Torres-Harding, S.R., King, C., & Song, S. (2003). Epidemiology. In L.A. Jason, P.A. Fennell, & R.R. Taylor (Eds.), *Handbook of chronic fatigue syndrome*. New Jersey: John Wiley & Sons.
- Terluin, B., Van der Klink, J.J.L., & Schaufeli, W.B. (2005). Stressgerelateerde klachten: spanningsklachten, overspanning en burnout. In J.J.L. Van der Klink, & B. Terluin (Eds.), *Psychische problemen en de werk. Handboek voor een activerende begeleiding door huisarts en bedrijfsarts* (pp. 259–290). Houten: Bohn Stafleu van Loghum.
- Travers, M.K., & Lawler, J. (2008). Self within a climate of contention: Experiences of chronic fatigue syndrome. *Social and Science Medicine*, 66(2), 315–326.
- Veldhuizen, I. (2003). *Acute fatigue and burnout*. PhD thesis, Tilburg University.
- Ware, N.C. (1992). Suffering and the social construction of illness – the delegitimation of illness experience in chronic fatigue syndrome. *Medical Anthropology Quarterly*, 6(4), 347–361.
- Weber, A., & Jaekel-Reinhard, A. (2000). Burnout syndrome: A disease of modern societies? *Occupational Medicine*, 50(7), 512–517.

- Wessely, S. (1990). Old wine in new bottles: neurasthenia and 'ME'. *Psychological Medicine*, 20(1), 35–53.
- Wessely, S. (1991). History of postviral fatigue syndrome. *British Medical Bulletin*, 47(4), 919–941.
- Wessely, S. (1994). Neurasthenia and chronic fatigue: Theory and practice in Britain and America. *Transcultural Psychiatric Research Review*, 31, 173–209.
- Wessely, S. (1996). Neurasthenia and chronic fatigue. In R. Porter, & G. Berrios (Eds.), *A history of clinical psychiatry* (pp. 509–532). London: Athlone.
- Wessely, S. (2001). Chronic fatigue: Symptom and syndrome. *Annals of Internal Medicine*, 134(9 Pt 2), 838–843.
- Wessely, S., Hotopf, M., & Sharpe, M. (1998). *Chronic fatigue and its syndromes*. Oxford: Oxford University Press.
- White, W.A. (1917). *The principles of mental hygiene*. New York: The Macmillan Company.
- Wilbur, D.L. (1949). Clinical management of the patient with fatigue and nervousness. *Journal of the American Medical Association*, 141(17), 1199–1204.