

Chapter 3

Towards Organizational Health: Stress, Positive Organizational Behavior, and Employee Well-Being

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Abstract Health is an important resource at the individual, organizational, and societal level. Work can be satisfying and engaging, but it can also be stressful and lead to poor health outcomes. Decades of stress research have identified a range of workplace factors that are potentially harmful to health. This work has been valuable and influential in helping organizations take action to reduce stress and absenteeism. However, rather less research attention has been paid to providing a greater understanding of the factors that promote positive health and well-being. This chapter reviews the contribution of stress research to organizational health and articulates the need for future research to better understand the antecedents and consequences of positive mental health.

Keywords Workplace stress • Positive organizational health • Employee engagement • Positive mental health at work

3.1 Introduction

“The least of things with a meaning is worth more in life than the greatest of things without it.” Carl Jung (1875–1961), *Modern Man in Search of a Soul* Health is a resource that allows people to lead individually, socially, and economically productive lives (MacIntosh, MacLean, & Burns, 2007) and is a key driver of socioeconomic

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progress internationally (Houtman & Jettinghoff, 2007). Work has been identified as an important social determinant of health and hence workplaces considered an appropriate setting in which to introduce interventions focused on achieving changes likely to improve mental health and well-being (Cartwright & Cooper, 2009; Waddell & Burton, 2006). For many years the co-dependence between individual and organizational health and its implications for wider society has been widely accepted (Cartwright & Cooper, 2009; Cooper & Williams, 1994) Poor employee health adversely impacts on job performance, productivity, occupational injuries, and accidents (Clarke, 2009) and ultimately effects the financial health and effectiveness of the organization. Yet, in times of economic recession when the requirement is often to achieve more with fewer resources, organizational investment in health and well-being initiatives is usually one of the first budget cuts to be made.

3.2 Work Related Stress and Health

In 2008/09 1.2 million employees in the United Kingdom (UK) were suffering from an illness they believed was caused or made worse by their work. Moreover, Swedish evidence suggests that as many as one in three employees continue to attend work when they are ill (Aronsson, Gustafsson, & Dallner, 2000) and perform sub-optimally (Stewart, Matousek, & Verdon, 2003). Work related stress has become the second most commonly reported work related ill health problem in the UK (Health and Safety Executive, 2005) and Europe (European Foundation for the Improvement of Living and Working Conditions, 2000). In a survey of 9,000 safety representatives polled by the UK Trade Unions organization, the TUC, stress was named as the top health and safety priority by two-thirds of respondents (Pearson, 2001) In 2004/05, stress related absence accounted for an estimated 12.8 million working days lost in the UK (Health and Safety Executive, 2005), and the World Health Organization predicts that by 2020 five of the top 10 medical problems worldwide will be stress related. Whilst stress is implicated in a variety of physical health problems, the most common stress related conditions are depression and anxiety, which affect one in five of the UK population and one in six U.S. employees (Quick, Macik-Frey, & Cooper, 2007). In the UK the annual costs of mental ill health to the economy have been estimated to be £77.4 billion (Sainsbury Centre for Mental Health, 2007). In the United States, workers with depression are estimated to cost in excess of \$44 billion pre year in lost productivity (Wang, Schmitz, Smailes, Sareen, & Patten, 2010).

As Taris and Kompier (2005) observe, the legacy of several decades of stress research emanating from different schools and research traditions is that we now know a great deal about the antecedents and consequences of ill health both from an individual and organizational standpoint. Whilst the potential sources of stress at work are many and various and differ across occupational groups and industry sectors (Johnson et al., 2005), research has consistently demonstrated that certain job features such as high job demands, low control, lack of skill variety, and social support are risk factors associated with stress. As well as environmental factors, stress

researchers have also identified individual characteristics of the employee, such as personality and coping behavior, which increase their vulnerability to stress (Cartwright & Cooper, 2005).

As more has become known about the particular characteristics of both the workplace and the individual worker that have the potential to impact on employee stress and health, Health and Safety legislation in the UK and Europe has broadened its remit to emphasize the responsibilities of employers to assess both the physical and psychosocial hazards to health inherent in the workplace and to take steps to address these by focusing on risk exposure in six key areas: demands, control, support, relationships, role, and change.

3.3 Current Approaches to Manage and Improve Employee Health

As a result, there is a growing body of literature that focuses on the way in which organizations can reduce stress (Kompier, Cooper, & Geurts, 2000). This can take the form of changing the nature of the job or the work environment to make it less stressful by introducing primary level interventions. (e.g., job redesign, cultural change), by changing the attitudes and behaviors of the individual through secondary level interventions (e.g., stress management training and health promotion programs) or by initiating tertiary level interventions to provide support and assistance to hasten the recovery of distressed employees (e.g., employee counseling).

Primary level interventions, as they simultaneously address both the work and the workplace are considered to be the most effective and ethically sound means of reducing stress related ill health (Noblet & LaMontagne, 2006), Cooper, Liukkonen, and Cartwright (1996) found that a primary level intervention designed to improve communication and consultation in a Dutch construction company resulted in a 30 % reduction in absenteeism. Similarly, an intervention focused on improving communication systems and processes in a UK government department resulted in a significant reduction in employee stress levels and increased perceptions of worker control (Cartwright, Cooper, & Whatmore, 2000). However, a review of stress intervention studies found that only nine out of the 74 identified studies involved primary level interventions and that in practice most interventions are individually focused and directed at increasing the responsibility of workers to take better care of their health and to manage stress more effectively.

In a review of stress intervention studies conducted by Murta, Sanderson, and Oldenburg (2007), 79 % took the form of stress management programs focused on encouraging individuals to exercise more control over their health, extend their personal resources, and so increase their physical and psychological resilience to stress.

The evidence on the effectiveness of secondary level interventions remains very mixed, particularly in relation to stress management training and the sustainability of any initial health improvements (Giga, Noblet, Faragher, & Cooper, 2003; Richardson & Rothstein, 2008). However, there is somewhat stronger evidence that health promotion programs present a good return on investment and lead to absence

reduction (Bertera, 1990), decreased medical costs (Astrup, McGovern, & Kochevar, 1992), and reduced staff turnover (PricewaterhouseCoopers, 2008). Recent evidence from the health and fitness campaign launched at a cost of £350,000 by the Metropolitan Police Force in London showed that annual absence levels fell from 10.2 days to 7.1 days over a 2-year period, representing a saving of well over £20million (Millar, 2005).

At the same time, evaluative studies of employee counseling programs have consistently shown that such interventions significantly improve self esteem and reduce depression and anxiety but have a neutral or negative impact on job satisfaction or engagement with the organization. Indeed, counseling is more likely to increase an individual's perceptions of their self-worth and change the expectations that workers have about the type of job and/or organizational culture in which they wish to work and so increase the likelihood of recovered employees to leave their current work environment.

Research within the stress framework has been extremely important in the identification of the aspects of work that result in negative emotional states and lead to ill health and has argued that there is much that organizations can do to make work environments less stressful by intervening to change working conditions and practices. Unfortunately, there has been a lack of evidential studies in terms of both quality and numbers to provide any powerful and persuasive support for a change in organizational attitudes towards primary level interventions, and employers still remain more inclined to attribute health problems to personality and lifestyle factors rather than the work environment itself.

3.4 Towards a Wider Definition and Definition of Organizational Health

The domination of stress in the employee health literature has tended to treat the concept of health in a limited way, i.e., assessed in terms of the absence or presence of stress. McHugh and Brotherton (2000) suggested that the concept of organizational health is ill defined and hence difficult to operationalize and measure in ways other than financial metrics. The kinds of financial metrics typically used to spur organizations to action tend to emphasize the high costs of employee withdrawal and absence from the workplace rather than positive gains which might be incurred by having a healthy and motivated workforce.

In a recent review of the health of the working population, the Black (2008) report to the UK government suggested that around 175 million working days were lost to illness in 2006. The report also highlighted the low rate of return to work amongst those with long periods of absence and the importance of absence management systems and return-to-work policies.

Traditional measures of health status have for the most part continued to adopt a medical perspective and focus on the negative aspects of health by employing measures and indices which take health as the normative baseline and conceptualize ill

health as a measured deviation from that baseline. Self-report measures have been long and widely used by occupational stress researchers and reflect the medical model in presenting employees with a check list of ill health symptoms and asking them to indicate the frequency and/or severity with which they have experienced these symptoms over the last few months (Bowling, 1997; Cartwright & Cooper, 2009). Hence, the traditional paradigm of healthy work is one in which stress and harm are absence.

Quick (1999) suggested that organizational health is characterized by high satisfaction, low absenteeism, low staff turnover, few accidents and grievances, and an absence of workplace violence. In short, that the indicators of positive organizational health represent the mirror image of those associated with stressful environments and poor employee health.

As long ago as 1946, the World Health Organization defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1946). Bennis (1962) suggested that organizational health was composed of three dimensions – namely, adaptability, coherence of identity, and the ability to perceive the world correctly and not just the absence of threats and health risks. Rosen (1993) considered that organizational health is epitomized by a core set of humanistic values, which include a firm belief in decency and respect of individuals. The recent Foresight (2008) report published by the UK Government Office for Science associates health and well-being with creative thinking, productivity, good interpersonal relationships, and resilience in the face of adversity as well as good physical and life expectancy. In addition, the concept of well-being has different meanings across different cultures (Littlewood, 2008).

According to Quick and Tetrick (2002), the difficulty in reconciling differing views as to what is meant by organizational health and the emergence of a clear definition is that positive health and ill health are two distinct concepts and so may involve different processes. Employers have a broad duty in law to ensure that employees are not at risk of injury or made ill by their work, which is reflected in the growth of Health and Safety legislation across the industrialized countries. Increasingly, organizations are being encouraged to regularly assess the physical and psychosocial hazards in the workplace that present a risk to employee health and take steps to eliminate and/or moderate these risks. Without doubt, occupational stress research has made a significant contribution to increase organizational awareness of the need to take these responsibilities seriously and address negative aspects of the work environment. However, until recently, there has been less research interest in addressing the variables that promote and enhance positive health and a re-examination of the factors that increase worker motivation and job satisfaction and lead to positive health outcomes. Warr (2009) differentiated between positive states such as cheerfulness, enthusiasm, joy, pleasure, satisfaction, or contentment and negative states such as anxiety, depression, stress, strain, and tension. Warr argued that instead of asking people how ill they feel, we should adopt a more appreciative method of enquiry and ask how well they are. Growing interest in the role of positive rather than merely negative emotions at work has reinforced Tetrick's

(2002) view that factors and processes associated with eustress are very different from those associated with distress. As Gable and Haidt (2005) stated, psychological research has been more interested in “learning how to bring people up from negative eight to zero but not as good at understanding how people rise from zero to positive eight” (p. 103).

The increased interest in positive psychology and the creation of “knowledge of what makes life worth living” (Seligman & Csikszentmihalyi, 2000), coupled with the pressing organizational demands to retain a healthy, optimally functioning, and engaged work force suggests that a switch in research direction in the field of employee and organizational well being is necessary.

3.5 The Characteristics of Healthy Organizations and Employee Well-Being

If health is more than the absence of stress and other negative states, then a truly healthy organization is one that aspires to create work environments that engender positive emotional states and so represent the positive end of health continuum. Ryff and Singer (1998) stated that leading a life of purpose, meaning, and quality relationships with others are core features of good health and well-being. Proponents of the positive psychology movement emphasize that work has to provide the conditions necessary for people to flourish and perform optimally and so achieve happiness and well-being. Jeurissen and Nyklicek (2001) suggested that factors such as job demands and autonomy are more strongly related to well-being and health variables than person characteristics.

Well being is a subjective concept experienced through the presence of pleasant emotions such as self evaluated happiness, through engagement in interesting and fulfilling activities, and generalized feelings of satisfaction with life. Despite improved living standards and economic growth across the industrialized countries, popular surveys suggest that individuals have a greater life expectancy but that they are not necessarily happier than they were in the past. Interestingly, the correlation between well-being and personal income is relatively low, suggesting that material wealth of itself does not make people happy (Myers, 2000). Furthermore, a global study conducted by Towers Perrin (2005) found that only 14 % of employees reported that they felt highly engaged in their work.

To some extent well-being is also influenced by personality, values, and individual resilience. Extroversion (DeNeve & Cooper, 1998), agreeableness, and conscientiousness (Judge, Heller, & Mount, 2002) were shown to be correlated with satisfaction. Furthermore, research has shown that job related happiness is lowest within the 30–40 age range. Positive emotions, in terms of active pleasure in work, have been shown to reduced absenteeism (Farrell & Stamm, 1988) and improved cognitive functioning in terms of recall of information and speed of processing (Forgas, 2001; Isen, 1999).

According to the American Psychological Association (Quick et al., 2007) an emotionally healthy workplace is characterized by five key dimensions:

1. Employee involvement in decision making and job autonomy
2. Work life balance through flexible working and scheduling
3. Employee growth and development
4. Health and safety through the provision of physically safe and psychologically secure work environments
5. Employee recognition

Wilson, Dejoy, Vandenberg, Richardson, and McGrath (2004) provided a testable and comprehensive model of a healthy work organization. This model consists of six higher order components broken down in to 26 different measurable dimensions. The six higher order components are:

1. Organizational attributes, comprising values, beliefs, policies, and practices
2. Organizational climate, comprising organizational and co-worker support, participation with others and with supervisors, communication, safety, and health climate
3. Job design, comprising workload, control/autonomy, job content, role, clarity, environmental and physical conditions, work scheduling
4. Job future, comprising job security, procedural and distributive equity, learning opportunities, and flexible work arrangements
5. Psychological work adjustment, comprising job satisfaction, organizational commitment, efficacy, and job stress
6. Employee well-being, comprising psychological health (depression, anger/hostility, somatic anxiety, health risk behaviors, and attendance behaviors)

Based on a cross sectional study of over 1,000 U.S. retail employees, the researchers found support for the model in that employees' perceptions of their organization affected their perceptions of the climate, which in turn impacted on the way individuals related to their job and saw their future in the organization. Such perceptions were shown to ultimately impact on their levels of work adjustment, health, and well-being. However, this model again focuses on measurement of negative emotional outcomes, such as anxiety and depression, and fails to accommodate dimensions relating to sense of purpose and meaning. Given that over one-third of employees cite their manager as the key reason for wanting to leave their organization (Robertson & Flint-Taylor, 2009), it also appears to understate the role of leadership in determining employee well-being and enhancing meaning (Markow & Klenke, 2005).

3.6 Meaning and Engagement

Organizations are increasingly incorporating items relating to engagement in their annual employee attitude surveys. Kahn (1990) conceptualized engagement "as the harnessing of organizational members' selves to their work roles; in engagement,

people employ and express themselves physically, cognitively, and emotionally during role performance” (p. 694). Engagement items are typically concerned with the investment of extra effort, alignment between individual and organizational values, fair treatment, and generalized beliefs that what the organization and their employees are doing is worthwhile and makes a difference. By implication, engagement is perceived as being underpinned by a sense of purpose, energy, and connectivity (Baumeister & Vohs, 2002). High levels of employee engagement have been shown to be associated with low employee turnover, customer satisfaction loyalty, and, to a lesser degree, productivity (Buckingham & Coffman, 1999; Harter, Schmidt, & Hayes, 2002) and positive health outcomes (Little, Simmons, & Nelson, 2007).

A sense of meaning is considered to be a central element of engagement. Baumeister (1991) suggested that there are four main needs that must be satisfied for individuals to make sense of their life and feel that their life or an aspect of it has meaning. These needs are a sense that (1) their current activities are purposeful and directed towards desired goals, (2) their actions are right, justifiable, and have positive value, (3) they have control over tasks and are able to complete them, and (4) what they do makes them feel good and worthy individuals. Unmet needs are likely to lead to disappointment, dissatisfaction, and de-motivation. Unmet needs within the workplace may result in negative outcomes such as physical or psychological withdrawal, poor health, and sub-optimal performance.

According to Pahl (1995) meaning is a mechanism for achieving stability in one’s life. It is believed that individuals are increasingly searching for meaning in their work because of the decline in traditional sources of community, such as neighborhoods, churches, and extended families and the increased amount of time people are spending at work (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Cartwright and Holmes (2006) link this greater search for meaning as a response to transactional employment contracts and the growing trend by employers to regard their workforce as a disposable asset. Whereas employers increasingly consider that it is sufficient to provide employees with merely a job and a chance to increase their market employability rather than long term security and personal growth, this has served to fuel employee cynicism, discontent, and a deeper sense of reflection on what people want from their work.

In a study based on interviews with 100 HR executives, Mitroff and Denton (1999) found that “ability to realize my full potential as a person,” “being associated with a good and ethical company,” and “interesting work” were the key factors that provided them with meaning in their work. Evidence indicates that search for greater meaning at work is more pronounced among younger workers. In a study of 10,000 young people, Bibby (2001) found that interesting work, a feeling of accomplishment, friendly and helpful colleagues, and adding something to peoples’ lives were rated more important than pay. Seligman (2002) suggested that the highest and most lasting state of happiness is only attained when persons feel that they are doing something that has meaning and value. Maslow (1943) considered that meaningfulness is a motivating need that goes beyond self-actualization. Cartwright and Holmes (2006) differentiated between job and social meaning. Job meaning relates to the individual’s sense of meaning derived from their job or workplace, whereas

social meaning is derived from relationships with others at work and feelings of belonging. In a study of hospital workers, Cartwright and Hall (2009) found that job and social meaning were linked to health outcomes but were potentially more strongly predictive of job satisfaction. Similarly, Conger (1994, as cited in Ashmos & Duchon, 2000) found that employees performed better when they felt part of a community at work and when they found meaning in this connection.

Balain and Sparrow (2009) argued that employee engagement surveys are used as a feedback mechanism and management control device to ascertain how well an organization seems to be doing and are often regarded as a proxy measure of performance. Assumptions are made that engaged employees will act as good citizens and will go out of their way to provide excellent customer service. Balain and Sparrow were highly critical of the content of many measures of engagement typically used by organizations on the basis that they treat engagement as an attitude, undistinguishable from other similar concepts such as job involvement, commitment, and citizenship behavior rather than an emotional or mental state.

An alternative approach (Maslach, Leiter, & Schaufeli, 2009; Maslach & Schaufeli, 1993) is to perhaps consider engagement more as a continuous variable reflecting the state of mental well-being of an individual. Maslach et al. (2009) define work engagement as a persistent, positive affect-motivational state of fulfillment that is characterized by vigor, dedication, and absorption and is the positive antithesis of burnout. The concept of burnout has a long history dating back to the 1970s (Freudenberger, 1974). Burnout is a psychological syndrome that occurs in response to prolonged exposure to chronic interpersonal stressors at work and is characterized by a loss of energy and a sense of emotional, and often physical, exhaustion. It has been shown to lead to poor job performance, withdrawal behaviors, and poor mental health (Leiter & Maslach, 2005). Burnout is conceptualized as consisting of three dimensions – namely, exhaustion, cynicism (or depersonalisation), and efficacy or the experience of reduced personal accomplishment. Cynicism as a means of creating defensive cognitive distance is regarded as a defensive coping response to exhaustion (Cherniss, 1980; Leiter & Maslach, 2005). Cynicism is associated with a lack of experienced meaning in the workplace and thus confirms the centrality and importance of meaning to positive psychological health.

3.7 Interventions to Promote and Enhance Positive Health

Seligman, Steen, Park, and Peterson (2005) developed a series of individually focused Web-based exercises to increase positive well-being. Their findings, based on 411 predominantly white participants, showed that certain interventions, i.e., an exercise requiring participants to write about three good things that happened each day and why they happened, and another that involved the utilization of individualized feedback resulted in a significant increase in happiness and a reduction in depression level that were sustained over a 6-month

period. The Foresight (2008) report commissioned by the UK government, which started measuring national well-being through the Office for National Statistics in 2011, also prescribed five ways to individual happiness. These health messages encourage the individual to connect with others more, to be active, to be more curious and attentive to the beauty of everyday moments, to learn new skills and knowledge, and to be more giving of their time. In the context of work, there has also been some renewal of interest in the Happy-Productive worker thesis. According to a review by Cropanzano and Wright (2001), happiness has variously been operationalized as job satisfaction, as the absence of negative affect, as the presence of positive affect, as a lack of emotional exhaustion, or as psychological well-being. Cropanzano and Wright concluded that support for the happy-productive worker thesis has remained equivocal because of these differences in the ways in which happiness has been measured. Whilst arguing that in the past the strength of the relationship between job satisfaction and performance has been overly conservative, they highlighted the limited but more supportive findings in studies where happiness is operationalized as (the lack of) emotional exhaustion and psychological well-being. In particular, well-being has been shown to be predictive of performance, even after controlling for job satisfaction, negative and positive affect, and demographic variables such as age, gender, and education (Cropanzano & Wright, 1999).

Whilst Cropanzano and Wright (1999) suggested that future research should address kinds of organizational strategies that employers could adopt to promote positive psychological health, the area still remains under researched, particularly in relation to different generational and occupational groups. This may be in part due to the lack of valid and reliable measures of positive organizational health and well-being. Concepts such as energy, meaning, and passion are easier to describe than to operationalize. Whilst organizations may recognize that they have a duty to ensure that their employees are not made ill by their work, it may be that they feel less comfortable with the notion that they should also be acting to encourage the positive enjoyment of work. Since industrialization the status of work has been seen as necessary but not necessarily pleasant.

Finally, there is the question of what kinds of interventions could be introduced to make work more pleasurable and engaging and also create a sense of meaning. This is a challenge for both organizational leadership and researchers. Whereas some suggest that positive organizational health can be achieved through the adoption of sustainable practices (Bichard, 2009), others emphasize effective work-life balance policies (Poelmans, Odle-Dusseau, & Beham, 2009), fair treatment (Siegrist, 1996) interesting work (Fisher, 2010), supportive organizational cultures and the freedom to express thoughts and feelings without discomfort within a psychologically safe environment (Quick et al., 2007).

It has taken decades of research to establish the antecedents and consequences of work related stress and poor mental health and their relative contribution. It is now perhaps the time to apply the same effort and vigor to establish the job and organizational antecedents and consequences of positive mental health.

References

- Aronsson, G., Gustafsson, K., & Dallner, M. (2000). Sick but yet at work: An empirical study of sickness presenteeism. *Journal of Epidemiology and Community Health, 54*, 502–509.
- Ashmos, D. P., & Duchon, D. (2000). Spirituality at work: A conceptualisation and measure. *Journal of Management Inquiry, 9*, 134–145.
- Astrup, S. J., McGovern, P. M., & Kochevar, L. K. (1992). The relationship between wellness participation and health care benefit utilization. *Benefits Quarterly, 8*, 41–54.
- Balain, S., & Sparrow, P. (2009). *Engaged to perform: A new perspective on employee engagement*. Center for Performance-led HR, White Paper 09/04. Lancaster, England: Lancaster University Management School.
- Baumeister, R. F. (1991). *Meanings of life*. New York: The Guilford Press.
- Baumeister, R. F., & Vohs, K. D. (2002). The pursuit of meaningfulness in life. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 608–618). Oxford, England: Oxford University Press.
- Bennis, W. G. (1962). Towards a “truly” scientific management: The concept of organizational health. *General Systems Yearbook, 7*, 269–282.
- Bertera, R. L. (1990). The effects of workplace health problems on absenteeism and employment costs in a large industrial population. *American Journal of Public Health, 80*, 1101–1105.
- Bibby, R. (2001). *Canada's teens: Today, yesterday, and tomorrow*. Toronto, Canada: Stoddart.
- Bichard, E. (2009). Creating a healthy work environment through sustainable practices: Future challenges. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 542–562). Oxford, England: Oxford University Press.
- Black, D. C. (2008). *Working for a healthier tomorrow*. London: Crown Publications.
- Bowling, A. (1997). *Measuring health: A review of quality of life measurement scales*. Buckingham, England: Open University Press.
- Buckingham, M., & Coffman, C. (1999). *First, break all the rules: What the world's greatest managers do differently*. New York: Simon & Schuster.
- Cartwright, S., & Cooper, C. L. (2005). Individually targeted interventions. In J. Barling, E. K. Kelloway, & M. R. Frone (Eds.), *Handbook of work stress* (pp. 607–622). Thousand Oaks, CA: Sage.
- Cartwright, S., & Cooper, C. L. (2009). *The Oxford handbook of organizational well-being*. Oxford, England: Oxford University Press.
- Cartwright, S., Cooper, C. L., & Whatmore, L. (2000). Improving communications and health in a government department. In L. R. Murphy & C. L. Cooper (Eds.), *Healthy and productive work: An international perspective* (pp. 57–82). London: Taylor & Francis.
- Cartwright, S., & Hall, R. (2009). *Making work more meaningful: An exploratory study of absenteeism in the UK health service*. 14th European congress of work and organizational psychology, May 13–16, 2009, Santiago de Compostela, Spain.
- Cartwright, S., & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and cynicism. *Human Resources Review, 16*, 199–208.
- Cherniss, C. (1980). *Staff burnout: Job stress in human services*. Beverly Hills, CA: Sage.
- Clarke, S. (2009). Accidents and safety in the workplace. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 31–56). Oxford, England: Oxford University Press.
- Cooper, C. L., Liukkonen, P., & Cartwright, S. (1996). *Stress prevention in the workplace: Assessing the costs and benefits to organisations*. Dublin, Ireland: European Foundation for the Improvement of Living and Working Conditions.
- Cooper, C. L., & Williams, S. (1994). *Creating healthy work organizations*. Chichester, England: John Wiley.
- Cropanzano, R., & Wright, T. A. (1999). A 5-year study of change in relationship between well-being and job performance. *Consulting Psychology Journal: Practice and Research, 51*, 252–265.

- Cropanzano, R., & Wright, T. A. (2001). When a “happy” worker is really a “productive” worker: A review and further refinement of the happy-productive worker thesis. *Consulting Psychology Journal: Practice and Research*, 53, 182–199.
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124, 197–229.
- European Foundation for the Improvement of Living and Working Conditions. (2000). *Third European Working Conditions Survey (EWCS)*. Dublin, Ireland: Author.
- Farrell, D., & Stamm, C. L. (1988). Meta-analysis of the correlates of employee absence. *Human Relations*, 41, 211–227.
- Fisher, C. D. (2010). Happiness at work. *International Journal of Management Reviews*, 12, 384–412.
- Foresight. (2008). *Mental capital and wellbeing: Making the most of ourselves in the 21st century*. London: Government Office for Science. Retrieved from http://www.bis.gov.uk/assets/bispartners/foresight/docs/mental-capital/sr-c10_mcw.pdf
- Forgas, J. P. (2001). *Feeling and thinking: The role of affect in social cognition*. Cambridge, England: Cambridge University Press.
- Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, 30, 159–165.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9, 103–110.
- Giga, S., Noblet, A., Faragher, B., & Cooper, C. L. (2003). The UK perspective: A review of research on organisational stress management interventions. *Australian Psychologist*, 38, 158–164.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268–279.
- Health and Safety Executive. (2005). *Survey of workplace absence sickness and (ill) health*. London, England: Health and Safety Executive. Retrieved from <http://www.hse.gov.uk/sicknessabsence/swash2005.pdf>
- Houtman, I., & Jettinghoff, K. (2007). *Raising awareness of stress at work in developing countries*. Geneva, Switzerland: World Health Organization.
- Isen, A. M. (1999). On the relationship between affect and creative problem solving. In S. W. Russ (Ed.), *Affect, creative experience, and psychological adjustment* (pp. 3–17). London: Taylor & Francis.
- Jeurissen, T., & Nyklicek, I. (2001). Testing the vitamin model of job stress in Dutch healthcare workers. *Work and Stress*, 15, 254–264.
- Johnson, S., Cooper, C. L., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20, 178–187.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of Applied Psychology*, 87, 530–541.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692–724.
- Kompier, M. A., Cooper, C. L., & Geurts, S. A. (2000). A multiple case study approach to work stress prevention in Europe. *European Journal of Work and Organizational Psychology*, 9, 371–400.
- Leiter, M. P., & Maslach, C. (2005). *Banishing burnout – Six strategies for improving your relationship with work*. San Francisco: Jossey Bass.
- Little, L. M., Simmons, B. L., & Nelson, D. L. (2007). Health among leaders: Positive and negative affect, engagement and burnout, forgiveness and revenge. *Journal of Management Studies*, 44, 243–260.
- Littlewood, R. (2008). *State-of-science review SR-X5: Comparative cultural perspectives on well-being. Report to foresight project, mental capital and wellbeing*. London: The Government Office for Science.

- MacIntosh, R., MacLean, D., & Burns, H. (2007). Health in organization: Towards a process-based view. *Journal of Management Studies*, *44*, 206–221.
- Markow, F., & Klenke, K. (2005). The effects of personal meaning and calling on organizational commitment: An empirical investigation of spiritual leadership. *International Journal of Organizational Analysis*, *13*, 8–27.
- Maslach, C., Leiter, M. P., & Schaufeli, W. (2009). Measuring burnout. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 86–108). Oxford, England: Oxford University Press.
- 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*. Washington, DC: Taylor & Francis.
- Maslow, A. (1943). A theory of human motivation. *Psychological Review*, *50*, 370–396.
- McHugh, M., & Brotherton, C. (2000). Health is wealth: Organizational utopia or myopia? *Journal of Managerial Psychology*, *15*, 744–770.
- Millar, M. (2005, October 25). Metropolitan police saves £30m by managing employee health. *Personnel Today*. Retrieved from <http://www.personneltoday.com>
- Mitroff, I. I., & Denton, E. A. (1999). A study of spirituality in the workplace. *Sloan Management Review*, *40*, 83–92.
- Murta, S. G., Sanderson, K., & Oldenburg, B. (2007). Process evaluation in occupational stress management programs: A systematic review. *American Journal of Health Promotion*, *21*, 248–254.
- Myers, D. G. (2000). The funds, friends, and faith of happy people. *American Psychologist*, *55*, 56–67.
- Noblet, A., & LaMontagne, A. D. (2006). The role of workplace health promotion in addressing job stress. *Health Promotion International*, *21*, 346–353.
- Pahl, R. (1995). *After success: fin-de-siecle anxiety and identity*. Cambridge, England: Polity Press.
- Pearson, P. (2001). *Keeping well at work*. London: Kogan Page.
- Poelmans, S., Odle-Dusseau, H., & Beham, B. (2009). Work-life balance: Individual and organizational strategies and practices. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 108–213). Oxford, England: Oxford University Press.
- PricewaterhouseCoopers. (2008). *Building the case for wellness*. London: Author.
- Quick, J. C. (1999). Occupational health psychology: The convergence of health and clinical psychology with public health and preventive medicine in an organizational context. *Professional Psychology: Research and Practice*, *30*, 123–128.
- Quick, J. C., Macic-Frey, M., & Cooper, C. L. (2007). Managerial dimensions of organizational health: The healthy leader at work. *Journal of Management Studies*, *44*, 189–205.
- Quick, J. C., & Tetrick, L. E. (2002). *Handbook of occupational health psychology*. Washington, DC: American Psychological Association.
- Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology*, *13*, 69–93.
- Robertson, I. T., & Flint-Taylor, J. (2009). Leadership, psychological well-being, and organizational outcomes. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 159–179). Oxford, England: Oxford University Press.
- Rosen, G. (1993). *A history of public health*. Baltimore: Johns Hopkins University Press.
- Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, *9*, 1–28.
- Sainsbury Centre for Mental Health. (2007). *Policy paper 8: Mental health at work: Developing the business case*. London: Author.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.

- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*, 5–14.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, *60*, 410–421.
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, *1*, 27–41.
- Stewart, W., Matousek, D., & Verdon, C. (2003). *The American productivity audit and the campaign for work and health*. Hunt Valley, MD: The AdvancePCS Centre for Work and Health.
- Taris, T. W., & Kompier, M. A. J. (2005). Job characteristics and learning behavior. In P. L. Perrewé & D. C. Ganster (Eds.), *Research in occupational stress and well being: Exploring interpersonal dynamics* (Vol. 4, pp. 127–166). Amsterdam: JAI Press.
- Tetrick, L. E. (2002). Individual and organizational health. *Research in Occupational Stress and Health*, *2*, 117–141.
- Towers Perrin. (2005). *Winning strategies for a global workforce. Tower Perrins Global Workforce Survey: Executive report*. New York: Towers Perrin. Retrieved from <http://www.towersperrin.com/tp/getwebcachedoc?webc=HRS/USA/2006/200602/GWS.pdf>
- Waddell, G., & Burton, A. K. (2006). *Is work good for your health and wellbeing?* London: The Stationery Office.
- Wang, J., Schmitz, N., Smailes, E., Sareen, J., & Patten, S. (2010). Workplace characteristics, depression, and health-related presenteeism in a general population sample. *Journal of Occupational and Environmental Medicine*, *52*, 836–842.
- Warr, P. (2009). Environmental “vitamins”, personal judgements, work values and happiness. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 57–85). Oxford, England: Oxford University Press.
- Wilson, M. G., Dejoy, D. M., Vandenberg, R. J., Richardson, H. A., & McGrath, A. L. (2004). Work characteristics and employee health and well-being: Test of a model of healthy work organization. *Journal of Occupational and Organizational Psychology*, *77*, 565–588.
- World Health Organization. (1946). Preamble to the constitution of the World Health Organization as adopted by the international health conference, New York, June 19–22, 1946 (Official Records of the World Health Organization, no. 2, p. 100). Geneva, Switzerland: World Health Organization. Retrieved from <http://www.who.int/bulletin/archives/80%2812%29981.pdf>
- Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People’s relations to their work. *Journal of Research in Personality*, *31*, 21–33.