



Government  
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 Foresight



# Wellbeing and work:

Future challenges

MENTAL CAPITAL AND WELLBEING PROJECT

# **Mental Capital and Wellbeing: Making the most of ourselves in the 21st century**

## **Wellbeing and work: Future challenges**

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### **This report is intended for:**

Policy makers and a wide range of professionals and researchers whose interests relate to stress and wellbeing at work. The report focuses on the UK but is also relevant to the interests of other countries.

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# Executive summary

This report forms part of the Foresight Project on Mental Capital<sup>1</sup> and Wellbeing<sup>2</sup> ([www.foresight.gov.uk](http://www.foresight.gov.uk)). The aim of the Project is to advise the Government and the private sector on how to achieve the best possible mental development and mental wellbeing for everyone in the UK in the future.

The starting point of the Project was to generate a vision for the size and nature of future challenges associated with mental capital and wellbeing, and to assess how the situation might change over the next 20 years – using the baseline assumption that existing policies and expenditure remain unchanged. To make the analysis tractable, the work was divided into five broad areas:

- Mental capital through life
- Learning through life
- Mental health
- Wellbeing and work, and
- Learning difficulties.

The present report documents the findings from the fourth of the above, and draws, in particular, upon a number of reviews of the state of the art of science commissioned by the Project<sup>3</sup>.

Chapter 1 starts by exploring the importance of wellbeing and stress in the workplace and considers how it has increasingly become a concern for employees, employers, professional bodies and Government. Each year stress from work is estimated to cost employers an estimated £3.7 billion<sup>4</sup>, and around 13 million working days are lost<sup>5</sup>. Also nearly 40% of people drawing incapacity benefits have a mental health condition – the total annual cost of these benefits is now around £12 billion, and the proportion of recipients has increased from 3% in the 1960s to 7% today<sup>6</sup>. The cost of stress in the workplace results from a wide range of sources, such as: sickness absence; labour turnover; premature retirement; health insurance; and treatment of the consequences of stress.

Wellbeing and stress are intimately influenced by the landscape of work, and this is changing due to a range of factors such as globalisation, the introduction of new technology, and the shift of developed economies from manufacturing to services and

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- 1 Mental capital refers to the totality of an individual's cognitive and emotional resources, including their cognitive capability, flexibility and efficiency of learning, emotional intelligence (e.g. empathy and social cognition), and resilience in the face of stress. The extent of an individual's resources reflects his/her basic endowment (genes and early biological programming), and their experiences and education, which take place throughout the lifecourse.
  - 2 Mental wellbeing is a dynamic state in which the individual is able to develop their potential, work productively and creatively, build strong and positive relationships with others, and contribute to their community. It is enhanced when an individual is able to fulfil their personal and social goals and achieve a sense of purpose in society.
  - 3 Appendix C details the Project reports and papers; all are available through [www.foresight.gov.uk](http://www.foresight.gov.uk)
  - 4 CBI (2005)
  - 5 HSC (2004)
  - 6 DWP (2006)



knowledge – the so called “weightless economy”<sup>7</sup>. Today, almost 81% of jobs in the UK are in the service sector, and the UK now sells more “knowledge services” as a proportion of our total exports than any other major economy<sup>8</sup>. These shifts are also influencing key issues that strongly affect wellbeing such as: work security; the intensification of work; work-life balance and stress. In one survey, 40% of respondents indicated that they worked long hours because they were scared of losing their jobs<sup>9</sup>. Furthermore, the shift to services has increased the emotional content of work, as employees interact more with clients and the public. Many of these factors are explored in Chapter 2, which shows how they interact with poor health and wellbeing in a vicious circle – with both employers and employees losing out.

The composition of the workforce is also changing and Chapter 3 explores several important trends. The first is the increasing number of women at work: for example, women now fill 70% of jobs in the service industries relating to public administration, education and health. Also, between 1998 and 2011, 82% of new jobs are expected to be filled by women. A second trend concerns the changing age-structure of the workforce – particularly the increasing numbers of older workers: by 2020, the number of people working beyond 65 is expected to increase by around 33% compared with 2005<sup>10</sup>. In the case of younger workers, changing aspirations and expectations are creating a generation gap. There are also increasing numbers of immigrant workers, many of whom are filling skills shortages in crucial sectors such as healthcare. By 2005, there were 1.5 million migrants working in the UK, representing 5.4% of the employed population<sup>11</sup>. Finally, there is a shift in the proportion of ethnic minorities in the workforce: by 2004, they made up 7.3% of all people in work.

Chapter 4 draws together the foregoing analysis and looks 20 years into the future. It starts by discussing the government targets which are aiming to reduce mental ill-health at work, and improve wellbeing. These targets, and the actions associated with meeting them, will themselves help to shape the future, and therefore form an important backdrop for the ensuing discussion. The chapter then identifies and discusses a number of major challenges that lie ahead:

- The drive for “fulfilling employment”: levels of job satisfaction are growing<sup>12</sup>, but they are accompanied by increasing employee expectations and demands – for example, for more control over the pace of work, and control over their working arrangements.
- The continuing problem of bullying at work, which costs upwards of £2 billion per year in the UK<sup>13</sup>, and covers a wide range of behaviours such as harassment, mistreatment, hostility and aversive behaviours<sup>14</sup>.
- The threat of violence at work – 1 in 14 workers surveyed in 2006 were “quite” or “very” concerned about being physically attacked or threatened by a member of the public while at work<sup>15</sup>.

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7 Coyle and Quah (2002)

8 Brinkley (2007)

9 Isles (2005)

10 Madouros (2006)

11 Salt and Millar (2006)

12 Brown et al. (2006)

13 CIPD (2005)

14 Beswick et al. (2006)

15 Hodgson et al. (2006)

- The challenge of people management, so that the potential of this key resource is released, workers are able to flourish and their contribution to the evolving economy is maximised.
- Increasing pressures for flexible working<sup>16</sup> and the need for more sophisticated forms of flexible working – in order to balance the increasing pressures of work with family and non-work time.
- The challenge of coping with stress in an increasingly intensive work environment.
- The critical need for the workforce to have the skills, resilience and flexibility to cope with the evolving landscape of work. Associated with this is the important issue of who has responsibility for the continual development of an increasingly mobile workforce.
- The need to rethink careers which are becoming “boundaryless”<sup>17</sup>.
- The central role of management in realising future competitiveness and in ensuring wellbeing.
- The increasing demand by employees for jobs where: the opportunity to advance is high; the work is interesting, varied and useful; they can work independently; and they have influence over how they work.

Overall, a key conclusion is the need to balance the relentless demands for increased competitiveness in a changing world with the needs of the workforce – to adapt to change, to cope with increasing pressures, but also to flourish. How these seemingly conflicting requirements can be balanced is outside the scope of this report, but is the subject of further analysis within the Foresight Project. The results of that work will be provided in the final Project report, which will be published in October 2008.

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16 CBI (2006b)

17 Kidd (SR-C10) – this is one of a number of science reviews commissioned by the Project. See Appendix C for a full list.

# **1 Introduction**

- 1.1 The importance of wellbeing and stress in the workplace**
- 1.2 The nature of wellbeing and stress**
- 1.3 The coverage of this report**

# 1 Introduction

Chapter 1 introduces this report, which analyses the evolving nature of work and the future challenge of mental wellbeing and stress in the workplace.

The importance of wellbeing and stress is first explored by drawing upon recent surveys that have been commissioned by Government Departments and other organisations. These two terms are then discussed – in particular, the central concept of “stress” as a transaction between the individual and the environment is introduced.

# 1 Introduction

This report forms part of the Foresight Project on Mental Capital<sup>18</sup> and Wellbeing<sup>19</sup> ([www.foresight.gov.uk](http://www.foresight.gov.uk)). The aim of the Project is to advise the Government and the private sector on how to achieve the best possible mental development and mental wellbeing for everyone in the UK in the future.

The starting point of the Project was to generate a vision for the size and nature of future challenges associated with mental capital and wellbeing, and to assess how the situation may change over the next 20 years – using the baseline assumption that existing policies and expenditure remain unchanged. To make the analysis tractable, the work was divided into five broad areas:

- Mental capital through life
- Learning through life
- Mental health
- Wellbeing and work, and
- Learning difficulties.

The present report documents the findings from the fourth of these areas, and draws, in particular, upon a number of reviews of the state of the art of science commissioned by the Project<sup>20</sup>. Options for addressing the challenges identified in all the above areas are addressed in the final Project report<sup>21</sup>.

## 1.1 The importance of wellbeing and stress in the workplace

Wellbeing at work has increasingly become a concern for employees, employers, professional bodies and Government alike. In a world of changing work practices, work structures, global market forces and technological innovation, greater burdens are being placed on all levels of society, particularly for those of working age.

The Department for Work and Pensions (DWP) in its strategy for the health and wellbeing of people of working age, makes clear that “neither our economy nor our society as a whole can afford to stand back and allow people to be written off”<sup>22</sup>, and that the issue of the health and wellbeing of people of working age should be given the attention it deserves. Other reports by the Health and Safety Commission (HSC)<sup>23</sup>, Department of Health (DH)<sup>24</sup>, and the DWP<sup>25</sup> also set out policy and

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18 Mental capital refers to the totality of an individual's cognitive and emotional resources, including their cognitive capability, flexibility and efficiency of learning, emotional intelligence (e.g. empathy and social cognition), and resilience in the face of stress. The extent of an individual's resources reflects his/her basic endowment (genes and early biological programming), and their experiences and education, which take place throughout the lifecourse.

19 “Wellbeing” throughout this report refers to “mental wellbeing”. Mental wellbeing is a dynamic state in which the individual is able to develop their potential, work productively and creatively, build strong and positive relationships with others, and contribute to their community. It is enhanced when an individual is able to fulfil their personal and social goals and achieve a sense of purpose in society.

20 Appendix C details the Project reports and papers: all are available through [www.foresight.gov.uk](http://www.foresight.gov.uk)

21 Appendix A provides further details of the work of the entire Project.

22 DWP (2005) p. 5

23 HSC (2000)

24 DH (2004)

25 DWP (2006)

recommendations on healthy working environments and empowering people at work. The common theme running through these documents is that: “bad” jobs make people ill; that stress at work affects people’s mental wellbeing; and that better occupational health will benefit everyone. Therefore, the task is to work together to make healthy choices easier, to improve the quality of jobs, and to develop policies at both government and organisational levels to support the overall health and wellbeing of employees.

Work-related stress is a complex issue and is widely recognised as a major challenge to global public health. In the UK, the Confederation of British Industry (CBI)<sup>26</sup> estimated in 2005 that there were over half a million instances where work-related stress resulted in people being absent from work, costing UK employers an estimated £3.7 billion. On average, it is estimated that each stress-related absence lasts 29 working days, resulting in approximately 13 million working days lost through stress each year<sup>27</sup>. In 2005/2006, the HSC estimated that 2.0 million people suffered from ill health<sup>28</sup> for reasons connected with work. Approximately 21% of these cases related to stress, depression or anxiety. A further 63,000 people reported work-related heart disease, ascribing their illness to work-stress and “indicating a prevalence of around half a million people reporting work-stress at a level which made them ill”<sup>29</sup>.

The costs of stress in the workplace arise from sickness absence, labour turnover, premature retirement due to ill health, escalating health insurance and treatment of the consequences of stress. As early as 2003, the Chartered Institute of Personnel and Development (CIPD) survey<sup>30</sup> on “living to work” reported that: working long hours resulted in 25% of those employees surveyed reporting some negative impact on health; 40% reporting a negative impact on their relationships; and most reporting a negative effect on their job performance. Such impacts have serious social consequences. More specifically in the United Kingdom, it has been estimated that the costs of stress are approximately 10% of Britain’s Gross National Product. Further estimates indicate that occupational stress costs business £5 billion a year<sup>31</sup> and society £3.8 billion<sup>32</sup>.

The recent substantial increase in the number of people claiming incapacity benefits in the UK has ensured that the wellbeing of employees remains in the forefront of the UK Government’s policy agenda. The proportion of people in receipt of these benefits<sup>33</sup> has increased from 3% in the 1960s to 7% in 2006, and the caseload has grown from 0.7 million to 2.7 million accordingly. Nearly 40% of claimants have a mental health condition compared to only 25% in the mid 1990s. Other economic impacts of work-related stress include the cost of employee turnover, which in many cases is equivalent to approximately five times the employee’s monthly salary, the costs of employee-assistance programmes and of related medical insurance.

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26 CBI (2005)

27 HSC (2004)

28 HSC (2006)

29 Health and Safety Executive (2006a) p. 2

30 CIPD (2003)

31 CBI (2005)

32 HSC (2004)

33 DWP (2006)

## 1.2 The nature of wellbeing and stress

Both mental wellbeing and stress are complex issues. The contemporary view of stress is to consider it in terms of a transaction between the individual and the environment. In this way stress does not reside solely in the individual nor in the environment, but in the transaction between the two. It is through the dynamics of this transaction that levels of wellbeing and stress are determined. This approach is particularly important since, by focusing on the transactional nature of stress, attention is drawn to those psychological processes that link the individual and the environment. In so doing, possible causal pathways are suggested for exploring the nature of stress.

An example of a psychological process which links the individual to the environment is the process of appraisal. Here, stress arises when the demands of a particular encounter are appraised by the individual, and are considered to tax or exceed the resources available, thereby threatening wellbeing<sup>34</sup>. There are two types of appraisal. The first (primary appraisal) is where the individual realises that something of importance “is at stake.” It is where the individual gives meaning to the encounter and is usually expressed in terms of harm, threat, loss or challenge in relation to wellbeing. Once an encounter is appraised in this way, then the concern is with what can be done about it (secondary appraisal). It is here where coping resources are evaluated to deal with the encounter. These two phases of appraisal are the key to understanding the nature of work-stress and relevant coping processes<sup>35</sup>.

## 1.3 The coverage of this report

In this report we consider the evolving nature of work and its impact on mental wellbeing. Our analysis is divided into three broad sections. First, we review past and present factors that have influenced the nature of work, and use these to explore its changing organisation (Chapter 2), and the changing nature of the workforce (Chapter 3). Finally, Chapter 4 draws on the foregoing discussion to identify and discuss major challenges associated with work that are likely to arise over the next 20 years.

The discussion in this report has also been informed by a survey which has explored the opinions of leading experts in the field of work-related stress, and health and safety. In particular, they were asked to identify: the most significant factors that will influence the nature and structure of work over the next 10 years; the ways in which these factors will influence work; the most significant differences between work as we currently experience it, and work in 10 years' time; and the impact such differences will have on wellbeing. The methodology and results of this survey are set out in Appendix D.

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34 Lazarus (1991)

35 Cooper et al. (2001)

## **2 The changing organisation of work**

**2.1 The landscape of work**

**2.2 Work security**

**2.3 Work hours and the intensification of work**

**2.4 The emotional qualities of work**

**2.5 The work-life balance debate**

**2.6 Flexible working**



## **2 The changing organisation of work**

This chapter considers how the nature of work is changing in the UK, focusing in particular on those aspects that are closely linked to stress and wellbeing. In so doing, it sets the scene for Chapters 3 and 4, which consider the changing workforce, and the challenges that lie ahead.

## 2 The changing organisation of work

### 2.1 The landscape of work

Changes in wellbeing at work can be best understood by considering the continually evolving nature of work in response to national and global changes. Advanced economies such as the United Kingdom have witnessed profound shifts in the economic, political, technological and social landscape over the past 15 years. These include: the fall of communism and the rise of new independent economies in Eastern Europe, as well as rapidly growing economies in Asia; and a reduction of national trade barriers, privatisation of public companies and the ending of state monopolies. Arguably, the three factors that have the greatest potential to affect workers and employers over the next 10 to 15 years are: (a) increased internationalisation and global competition; (b) technological innovations and the increased utilisation of ICT; and (c) demographic shifts in the workforce.

In short, globalisation has significantly affected industries and sectors of the workforce that once enjoyed relative stability – through expanding trade, accelerating the flow of capital, demanding workforce mobility and transforming the rate of knowledge transfer and technological development. Global competition also highlights the challenges faced by the growing importance of China and India as world economies. On the one hand, intense competition may help to cut consumer prices and lower inflation. However, the demands of the fast-growing Chinese and Indian economies also help to push up the cost of natural resources, “squeeze profits” for those industries manufacturing low-cost standardised products, and place at a competitive disadvantage those economies burdened by complex regulations and taxes<sup>36</sup>.

Economies also continue to change from being based primarily on production, to being increasingly based on the provision of information and services. Technological advances will continue to influence: how capital, materials and labour are organised, combined and skilled; and how and where they are located to produce goods and services that reflect a significant increase in their level of knowledge intensity, where differentiation rather than mass production is emphasised, and where value is placed on design and attention to fashion.

Demographic changes will increase the current trend towards a more culturally diverse workforce, reflecting an ageing workforce coupled with generational differences in aspirations and values, the increasingly important role of women in the labour market, patterns of immigration and differential fertility rates<sup>37</sup>. At the same time, advances in technology will require the workforce in the future to be higher skilled, and to be more flexible in how work is organised and how organisations are structured. In addition, these factors will influence and be influenced by issues surrounding the challenge of climate change including: environmental management through eco-friendly, sustainable, fair-trade innovations and policies; ethical leadership; and research and development that fosters high-efficiency low-carbon work structures and working patterns.

As a consequence of these “macro-developments”, the contexts for work will continue to change. Work patterns already enthusiastically embrace part-time working, longer work hours, and team-based working. Transforming and reinforcing these patterns of

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<sup>36</sup> CIPD (2007b)

<sup>37</sup> For a fuller discussion of changes in the workforce, see Chapter 3

work will be a demand for “high performance work practices” requiring: new forms of responsibility for employees; new ways of managing organisations; and more flexible work opportunities embracing innovative ways of working. These practices will be shaped by the continuing demands of cost-effectiveness and quality. Organisations and those who work in them will become increasingly familiar with managerial techniques requiring performance management and performance-related pay, lean manufacturing, just-in-time management, talent management, and smart work. Organisations will employ a range of human resource-related techniques to maximize the use of human capital, and resource-based (competing through people) strategies. Underlying these practices are: the drive for cost effectiveness, profit and a return to shareholders; demands for greater workforce flexibility and increased skills; and a relentless drive towards the use of new technology and continuous technological development.

## 2.2 Work security

These changes at the macro level have led to a shift in attitudes towards job- and work-security. Globalisation, accompanied by the “vertical disaggregation of organisations”, where non-core functions are outsourced, has seen the downsizing and restructuring of organisations, and the redefinition of working arrangements and relationships. These developments have led to increased perceptions of insecurity at work – not just by those employees who have lost their jobs, but also by those who have survived reorganisation and by those managers who have implemented such measures. The CIPD 2007 annual survey<sup>38</sup> showed that almost a quarter (24%) of respondent organisations had made more than 10 people redundant in 2006. The three most important factors influencing redundancy decisions included: “reorganised work methods”, “reductions in budget/cash limits”, and “improved competitiveness – efficiency/cost reductions.” Complementing these findings, the 2006 annual survey by the CIPD on management of absenteeism<sup>39</sup> shows that 34% of respondents ranked organisational change/restructuring as one of their top three causes of stress, with 12% ranking it highest. Job insecurity was also identified as a cause of stress, with 10% of respondents ranking it among their top three causes and 2% ranking it as their most important.

The impact of organisational practices such as outsourcing, redefining the role of middle management, and flattening organisational structures, has increased the tendency to characterise work as insecure. This is despite the evidence which suggests that, overall, job tenure has not declined – with fewer workers losing their jobs due to redundancies, and labour turnover remaining fairly stable<sup>40</sup>. However, despite the evidence, there still seems to be a general perception that people are not secure in their jobs. Almost 40% of respondents in the Work Foundation survey<sup>41</sup> indicated that they worked long hours because they feared losing their jobs. Isles<sup>42</sup> has suggested that “employees need to re-invent job security” – by, for example, exploring how to minimize the impact of restructuring by considering redeployment and re-training where necessary. However, this picture of job insecurities may obscure a more subtle trend where the “motivational potential” of work may be beginning to shift away from emphasising income and job security, towards a greater demand for interesting and meaningful work.

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38 CIPD (2007d)

39 CIPD (2006)

40 DTI (2006); Isles (2005)

41 Isles (2005)

42 Ibid

Analysis of data from the British Social Attitude survey (2007)<sup>43</sup> pointed towards respondents emphasising the importance of intrinsic job characteristics. Also, in characterising their own jobs, respondents saw them as opportunities to be helpful and useful to other people and useful to society. These findings are supported by data from the Work Foundation<sup>44</sup>, where respondents indicated that work content, fulfilling personal ambitions, and working with others were very important facets of their jobs, and were generally very satisfying. Similarly, the CIPD 2007 survey of HR trends and prospects<sup>45</sup> found that about half of the respondents considered that work was personally meaningful and that they were satisfied with their jobs. However, there is disagreement as to whether these trends are actually a move towards “post-materialist” values, where in the future we may see the demand for more meaningful work coupled with an associated need to balance non-work activities such as family life and leisure<sup>46</sup>.

### 2.3 Work hours and the intensification of work

Work intensification is a second consequence of these macro-changes in the United Kingdom, as well as in other western countries. Changes in the way that work is organised, rewarded and controlled have led to an increase in the intensity with which work is allocated and performed. This is often due to team working and performance-related pay, coupled with changes in the nature of work from physical to mental. The CIPD 2006 annual survey report on absence management<sup>47</sup> noted that workload/work volume was ranked in the top three causes of stress at work by 57% of respondents with 33% ranking it as their number one cause of stress. Similarly, the working paper on transforming work produced by Smeaton, Young and Spencer<sup>48</sup> for the Equal Opportunities Commission pointed not just to the growth of team working as a source of strain, but that its expansion as a management practice also caused an intensification of work among all workers. This report also showed a similar picture following the extension of performance-related pay with, on average, 66% of respondents indicating that they worked harder. This report concluded that despite the benefits that flow from techniques such as team work, “it is also associated with work intensification and more performance control by means of financial incentives all of which lead to a more stressful environment”<sup>49</sup>.

Long hours and the intensification of work also produce more complex employment patterns and working relationships. These work patterns add to a “time-pay gender divide”<sup>50</sup>, where men are caught in an endemic of longer working hours, and where women face increasing work intensification but at the cost of a widening hourly pay gap when compared to men. This culture of long hours and work intensification also spills over into non-working life, increasing stress and leading to wider social costs relating to family and other relationships. Further investigation is still needed of how employees appraise the intensity with which they work. Analysis of the 2005 British Social Attitudes Survey data<sup>51</sup> suggests that current patterns of working result in both men and women reporting more stress at work, growing difficulties in combining paid

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43 Crompton and Lyonette (2007)

44 Isles (2005)

45 CIPD (2007b)

46 Crompton and Lyonette (2007)

47 CIPD (2006)

48 Smeaton et al. (2007)

49 Smeaton et al. (2007) p. 64

50 EOC (2007b)

51 Crompton and Lyonette (2007) pp. 62-63

work with family and social life, a preference by both men and women to spend more time with family and friends and less time at work, and the idea that some sort of work-life balance is increasingly improbable. Where employers seek to overcome barriers to increased productivity by seeking to increase the hours worked without exploring a range of flexible work practices, these social costs are likely to be exacerbated<sup>52</sup>. A case perhaps, as the EOC points out, of work practices at odds with the way we want to live<sup>53</sup>.

## 2.4 The emotional qualities of work

A third feature of these macro changes stems from the growth of employment opportunities in the service sector, where work takes on more of an emotional quality. The term “emotional labour” has been used to describe those jobs where employees, often when interacting with clients, are expected to express certain emotions irrespective of how they may be feeling. This “emotional expressed-felt discrepancy” is often associated with negative wellbeing and job dissatisfaction. Similarly, for those working in the human service professions, job-related burnout has taken its toll. For many of these workers, their job leaves them feeling emotionally exhausted and lacking in a sense of accomplishment, accompanied by a growing sense of depersonalisation. This may help to explain why in a recent Towers Perrin Global Survey<sup>54</sup>, 23% of those employees surveyed in the United Kingdom indicated that they felt disengaged, while 65% described themselves as only moderately engaged. As the survey authors point out, having a willing workforce may not be a bad thing, but there is a significant difference between being willing and being engaged when it comes to competition and productivity.

Concerning satisfaction at work, according to recent surveys many people in the UK seem relatively satisfied in their jobs, despite the evidence of a long-term decline in job satisfaction. For example, data from the European Working Conditions Survey (2005) showed that around 45% of employed persons were either “very satisfied” or “satisfied” with working conditions. While the focus of this survey was on working conditions, the picture seems much the same when the focus shifts to satisfaction with work or the job: 67.3% of those surveyed by the Work Foundation<sup>55</sup> indicated that they were “very satisfied” or “satisfied” with their work or job. Similar results are revealed in the 2004 British Social Attitude survey<sup>56</sup>. Here 76% of respondents indicated that they were “fairly”, “completely” or “very satisfied” with their job. Even more satisfaction was expressed in terms of family life where 88% indicated that they were “fairly”, “completely” or “very satisfied”. Those “fairly”, “completely” or “very dissatisfied” with their jobs stood at 12%. Levels of job dissatisfaction were higher (26%) in the CIPD survey of HR trends and prospects<sup>57</sup>; the same proportion (26%) of those surveyed indicated that they rarely or never look forward to going to work. Concerning satisfaction with different facets of the job, data from the 2004 Workplace Employment Relations Survey (WERS)<sup>58</sup> showed that high levels of satisfaction were associated with the work itself, scope for using initiative, and a sense of achievement,

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52 EOC (2007b)

53 Ibid

54 Towers Perrin Global Workforce Study (2006)

55 Isles (2005)

56 Bell and Bryson (2005)

57 CIPD (2007b)

58 Kersley et al. (2004)

while low levels of satisfaction were associated with the level of involvement in decision-making and pay.

The picture to emerge from the WERS data confirmed the complexity when interpreting job satisfaction levels. Here around half the sample (51%) expressed a mixture of satisfaction-dissatisfaction across the different job facets measured with levels varying across workplaces and “between individuals within the same workplace”<sup>59</sup>. While, as Isles<sup>60</sup> points out, job satisfaction percentages appear encouraging, it is not until percentages are expressed as numbers that the “stark terms” of dissatisfaction emerge. Converting the percentage of those in the Work Foundation survey who reported feeling dissatisfied or very dissatisfied with their job or work (15%) into workforce numbers means that around “4.2 million workers are pretty unhappy with their work or jobs”<sup>61</sup>.

Probing further, the Work Foundation survey results may shed some light on why, for some workers, there is a sense of disengagement: with 38.7% of their sample agreeing that “work is just a means to obtaining an income,” 69.8% agreeing that “my work fits in with other things,” and, perhaps surprisingly, 22.6% indicating that they would stay in their job even if they got no satisfaction from it. Another issue highlighted in this survey is that over a third (37.9%) of those sampled are actively looking for a new job, or are planning to do so. It is also interesting to note that about 45% are currently working more flexibly or planning to do so in the future. However, for the great majority of these workers<sup>62</sup> it is the content of the job, fulfilling personal goals and ambitions, and working with others that are very important factors affecting their level of satisfaction at work. Nevertheless, despite these feelings of satisfaction, and while over 70% of those surveyed by the Work Foundation<sup>63</sup> thought that “life was good”, and almost the same proportion indicated that they wouldn’t change their lives, there were still about 420,000 workers in Britain in 2006 who believed they were experiencing stress, depression or anxiety at a level that was making them ill<sup>64</sup>.

The same Health and Safety Report<sup>65</sup> indicated that in 2005/2006 work-related stress accounted for around 10.5 million reported working days lost per year in Britain. This represents “an estimated average of 30.1 working days lost per year per affected case and makes stress, depression or anxiety one of the largest contributors to the overall estimated annual days lost from work-related ill-health”<sup>66</sup>. The CIPD survey of HR trends and prospects tends to confirm this picture, with 22% of those surveyed experiencing high levels of stress, and 44% reporting that they felt under excessive pressure at least once or twice a week<sup>67</sup>.

With regard to employees who felt that their job made them feel tense, worried or uneasy: the WERS data<sup>68</sup> showed that these feelings were experienced all or most of the time for 19%, 12% and 10% respectively of their sample. While there has been a slight decline in reported levels of stress since 2005, 1 in 6 of the working population

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59 Kersley et al (2004) p. 33

60 Isles (2005)

61 Isles (2005) p. 13

62 Isles (2005)

63 Ibid

64 HSE (2007a)

65 Ibid

66 HSE (2007a) p. 12

67 CIPD (2007b)

68 Kersley et al. (2004)

report feeling under stress, and in all the HSE work-related illness surveys since that date, stress is still the most reported work-related ill-health condition after musculoskeletal disorders<sup>69</sup>. The extent of the problem of work stress may well be compounded by the difficulties that surround its management in the workplace. The 2006 CIPD annual survey report on Absence Management<sup>70</sup> reports that the main obstacles faced by organisations that when attempting to address the problem of stress at work include: the fact that stress is not clearly defined and is difficult to identify; an increase in performance targets and workload; lack of skills for dealing with stressed staff; organisations that are often not committed or do not take stress seriously enough; and the difficulty in building a business case for investment in stress management.

## 2.5 The work-life balance debate

Over the last decade, initiatives have been put in place to promote “ways of working that enable employees to combine paid work with other aspects of their lives more effectively”<sup>71</sup>. These initiatives have been encouraged by Government policies that aim to make work more attractive. These initiatives, and the legislation that has accompanied them, all fall under the rubric of “work-life balance.” However, there is still a need for greater clarity about: the meaning of the term “balance”; what it is we should be striving for; and where such a balance should lie. This is required so that a “sensible and realistic public policy agenda” can be set<sup>72</sup>. In general, however, the approach has been to explore what needs to be put in place to strike a “good balance” between work and other aspects of life. More research and greater understanding is needed in several areas, including: caring responsibilities, both now and in the future; the transformation of the labour market with more women in paid employment; the demands for change in the nature and structure of work as a result of global competition and technological innovations; the intrinsic importance of work and its satisfactions and dissatisfactions; the purpose of work in our lives; what is acceptable and workable in terms of new working practices; and the protection of employees’ interests – “without at the same time endangering business competitiveness and productivity”<sup>73</sup>.

One of the drivers for a more balanced approach to work comes from the belief that Britain suffers from a culture of long working hours, compared to the rest of Western Europe. The proportion of those in full-time employment in the UK who usually work over 48 hours per week has marginally declined since 2001. This downwards decline is expected to continue as a result of the Working Time Directive<sup>74</sup>. The introduction of this directive has seen “the proportion of full-time employees engaged in working long [over 48] hours fall by a fifth”<sup>75</sup>. Nevertheless, over much the same time period, there has been a sustained increase in the proportion of those who wish to spend less time at work and more time with family and friends<sup>76</sup>.

However, even while the average number of hours worked may be declining, long hours are still a reality for many UK workers. Data from the Work Foundation survey<sup>77</sup>

69 HSE (2006a)

70 CIPD (2006) p. 26

71 Bell and Bryson (2005) p. 33

72 Taylor (2001) p. 6

73 Taylor (2001) p. 8

74 DTI (2006)

75 DTI (2006) p. 21

76 Crompton and Lyonette (2007)

77 Isles (2005)

showed that slightly over a third of their sample work more than 40 hours a week, with around 10% of their sample working over 50 hours a week. The WERS data<sup>78</sup> showed a similar picture, with 11% of employees usually working more than 48 hours a week. The WERS data also explored how often employees worked more than 48 hours a week over the past year: 9% had worked more than 48 hours a week at least once a month over the past year, with 11% indicating that they worked those hours two or three times a month. Data from the 2005 British Social Attitudes survey<sup>79</sup> confirms that for many (60%), the demands of the job “sometimes” or “always/often” interfere with family life – rather than vice versa, where only 28% indicated that the demands of family life “sometimes” or “always/often” interfere with the job.

Participants in the Work Foundation survey<sup>80</sup> gave three main reasons for working long hours. These were “to speed up getting promoted” (60%), “because they were scared of losing their job” (39%), and “because of the volume of work” (25%). Sixty-one per cent of those from the same survey said they would prefer to work less.

Data from the 2004 British Social Attitude survey<sup>81</sup> also confirmed that work-life balance was important when thinking about career choices. Twenty-two per cent indicated that “a good work-life balance” was the most important consideration when thinking about career choices, with 21% regarding it as the second most important. Perhaps predictably, a secure job (33%) and interesting work (25%) were rated as the two most important considerations when making career choices. Looking at the same data<sup>82</sup>, it was clear that a great number of employees found it very difficult to balance work and home life. For example 58% disagreed or strongly disagreed with the statement that “my job is rarely stressful” with 66% agreeing or strongly agreeing that “there are so many things to do at home that they often run out of time before they get them all done.” Building on these findings, 54% reported that they came home from work “too tired to do everything they need to do” several times a month or more, with 27% reporting that several times a month or more they find it “difficult to concentrate at work due to family responsibilities”.

On the reasons why employees want to work less, the overwhelming reason to emerge from the Work Foundation survey<sup>83</sup> was time for leisure. This was followed by time with a partner, children, friends and family. Data from the 2005 British Attitude Survey<sup>84</sup> supports this finding, with the analysis showing a “sustained” increase since 1989 for both men and women preferring to spend more time with family and friends and less time at work. The authors go on to suggest that this trend may reflect a change in people’s expectations “but equally our results are consistent with the argument that increasing pressures within the world of work are leading to growing difficulties in combining paid employment with family and social life”<sup>85</sup>. These findings are part of the evidence that has led the Equal Opportunities Commission (EOC) to comment that “the way we work no longer fits the changing world we live in. As we look to the future, it looks increasingly unsustainable”<sup>86</sup>.

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78 Kersley et al. (2004)

79 Crompton and Lyonette (2007)

80 Isles (2005)

81 Bell and Bryson (2005) p. 51

82 Bell and Bryson (2005)

83 Isles (2005)

84 Crompton and Lyonette (2007)

85 Crompton and Lyonette (2007) p. 62

86 EOC (2007a) p. 13



## 2.6 Flexible working

It is not just the long hours being worked that drive the case for transforming work: changes in workforce demographics and the changing aspirations of workers also mean that “the way we work is not responding fast enough to the challenges presented by changes in the world around us”<sup>87</sup>. With half the workforce wanting to work more flexible hours, flexible working arrangements become an important part of any work change agenda. While flexible working is already a common practice and flexible working arrangements are on the increase, the EOC argues that it is not happening fast enough, or in the right way to deliver what people and organisations want. This makes “the flexibility agenda unfinished business for 21<sup>st</sup> Century Britain”<sup>88</sup>.

The EOC<sup>89</sup> argues that there is a need for some “ground clearing” when it comes to understanding what flexible working actually means. In many ways flexible working has become defined by the practices and arrangements that have been developed over the years, and so has come to mean different things to different people. The EOC<sup>90</sup> argues that this variation is making it harder for employees and organisations to arrive at what meets their needs. Using data from the 2004 British Social Attitude survey, Bell and Bryson<sup>91</sup> make the distinction between *flexible working options* where particular practices are formally agreed and implemented, and a *flexible ethos* requiring flexibility when circumstances demand it. It is clear from the 2004 British Social Attitude data that the availability of different *flexible working options* has increased considerably in the decade leading up to 2004, with the most available options being (in order) part-time work, flexible hours and job-sharing, with these options available to 64%, 49% and 38% of employees respectively. Although the availability of working from home and term-time work has increased since 1994, they are still the least common options, available only to 24% of those surveyed. In terms of a *flexible ethos* the majority of employees said their organisation offered time off when children were sick or for other reasons, and to care for others. The Employment Trend Survey<sup>92</sup> showed that increasing use was also made by employers of other flexible working options such as career breaks and sabbaticals, annualised hours, teleworking and compressed hours.

Data from the 2004 British Social Attitude survey<sup>93</sup> also show that since 1994, the greater availability of flexible working options has resulted in an increased level of use by employees. Employees reported the greatest use of flexible hours (33%), followed by part-time work (30%), and working from home (16%), with both job-sharing, with these options and term-time working used by 9% of employees. The four key reasons employers gave for providing employees with flexible working opportunities included: to improve morale, staff retention and recruitment (41%); to work around the family life of staff to benefit staff (37%); to improve service for clients/customers (20%); and to improve productivity (8%)<sup>94</sup>. While the issues around the demand for flexible working are complex, data from the 2004 British Social Attitude survey suggested that there had been little change in the overall demand for flexible working over the last 10

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87 EOC (2007a) p. 16

88 EOC (2007a) p. 3

89 EOC (2007a)

90 Ibid

91 Bell and Bryson (2005)

92 CBI (2006a)

93 Bell and Bryson (2005)

94 Smeaton et al. (2007)

years. This in turn, suggests that “the ‘pool’ of employees wanting flexible working arrangements has remained largely static”<sup>95</sup>.

Little change in demand could be because: approaches to flexible working are more “piecemeal” than “strategic”; that they focus on time, failing to consider location or career; that they fail to match what is offered with what is wanted; and that they provide few opportunities to discuss flexible working, particularly the different types of flexible work and the benefits they offer<sup>96</sup>. Hence the EOC’s call for new models of flexible working that provoke discussion and offer opportunities to develop different options for different circumstances, rather than standardised practices that can be prescriptive and restraining.

As data from the 2004 British Social Attitude survey suggest: “work-life balance considerations clearly matter a great deal to a significant proportion of employees”<sup>97</sup>. Nevertheless the long-hours culture still seems to be an issue that gets in the way. Data from the same survey indicates that 45% of employees strongly agree or agree that in the jobs they are in, there is an expectation that they will work longer hours than they used to, with just over a quarter strongly agreeing or agreeing that in the kind of job that they do they are expected to work more than 48 hours a week. Flexible working arrangements are one way forward to achieving work-life balance, but such arrangements are complex – depending on marital status, gender, dependents and caring responsibilities. Nevertheless, they are an important way forward, if for no other reason than the result of the analysis<sup>98</sup>, which shows that wanting but not having fixed flexible working arrangements leads to lower levels of job satisfaction. Where organisations provide a more flexible working ethos, higher levels of job satisfaction prevail. Despite the complexities of the relationship between work-life balance and flexible working, Bell and Bryson<sup>99</sup> conclude from their analysis that “flexible work is nevertheless a legitimate tool to use in the pursuit of greater employee satisfaction”.

Flexible working arrangements also have a role to play when it comes to reducing stress. It is clear from the 2005 British Social Attitude survey<sup>100</sup> that employees feel under pressure, with just over a fifth indicating that they never seem to have enough time to get everything done in their job, 23.1% indicating that they come home from work exhausted and 18.3% indicating they always or often find their work stressful. Interestingly, the survey also showed that almost a third of employees cannot change their starting or finishing time, with 15.3% saying they would find it very or somewhat difficult to take an hour or two off during working hours to take care of a personal or family matter. Analysis of the 2005 data demonstrated that work stress is significantly associated with the desire to spend more time with the family. It also argues that if work is becoming more stressful, flexible working “will not, by itself, improve this balance”<sup>101</sup>. So perhaps “work-life” policies should have a more conscious focus on reducing stress and pressures at work, thereby requiring policy makers to move beyond just thinking in terms of flexibility, taking what Taylor<sup>102</sup> describes as a more comprehensive review of what is required.

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95 Bell and Bryson (2005) p. 45

96 EOC (2007a)

97 Bell and Bryson (2005) p. 51

98 Bell and Bryson (2005)

99 Bell and Bryson (2005) p. 54

100 Bell and Bryson (2005)

101 Crompton and Lyonette (2007) p. 66

102 Taylor (2001)

The landscape of work as described above is designed to give an overview and provide a context for subsequent chapters. In this way the research cited and the survey material referenced have been used to give a descriptive understanding for the more complex trends and forces. At times, some of these complexities have been acknowledged and discussed. However, the aim has been to paint a broad canvas from which future directions can be distilled, with the hope that in this way, those directions will provide a context against which more complex trends can be explored.

## **3 Changes in the nature of work and the workforce**

**3.1 The “weightless” economy**

**3.2 Women at work**

**3.3 The older worker**

**3.4 The younger worker**

**3.5 Immigration and ethnicity**

### **3 Changes in the nature of work and the workforce**

Having discussed the changing organisation of work in Chapter 2, the main focus of this chapter is the changing nature of the workforce.

Two important themes are first considered: the pervasive introduction of new technology in work, and the shift to the “weightless economy”. These themes interact closely with factors influencing the changing workforce, and set the scene for a discussion of important shifts relating to women at work, older and younger workers, and immigration and ethnicity.

## 3 Changes in the nature of work and the workforce

### 3.1 The “weightless” economy

Over the last three or four decades, there have been dramatic and complex changes in opportunities to work, the nature of work and the way we want to live and work. There are currently about 31.5 million jobs in the UK. Today almost 81% of these jobs (25.5 million) are in the service sector. While all advanced economies have experienced a shift from manufacturing towards services, this growth has occurred at a faster rate in the United Kingdom than in most other countries, and it is continuing almost unabated. Whether this change is best characterised as a post-industrial society, a knowledge-based economy, a network economy or a new economy, what is clear, is that the “economy is becoming increasingly weightless”<sup>103</sup>. The “weightless” idea, as Coyle and Quah<sup>104</sup> describe, is where “creating value depends less and less on physical mass, and more and more on intangibles, such as human intelligence, creativity, and even personal warmth”.

The term “weightless” economy offers a way of understanding changing workforce patterns, particularly in the demand for different kinds of skills. However, in respect of this “new economy”, it is important to explore the “socialisation of technology rather than a technological society”<sup>105</sup>. Two issues appear important. The first is that the impact of technology in reshaping the economy towards a knowledge-based economy cannot be understood by limiting debate to arguments about productivity. The real “engine of change” in the economy will, in the future, be fuelled by consumer demand<sup>106</sup>; consumers will “buy what seems necessary and use what seems useful”<sup>107</sup>. If this is the case, a much broader range of indicators must be explored to understand the changes and transformations in work and society. The second issue is the recognition that technological innovations that have increased productivity and stimulated advanced business processes in certain sectors will have a more dramatic effect across the whole economy. This will occur as technology continues to become more “general purpose” in its orientation: where the same technology offers a range of uses across many industries, products and life activities, and where it develops hand in hand with other technologies, it has the potential to provide considerable improvements<sup>108</sup>.

Before exploring the range of indicators necessary to develop an understanding of the impact of technological innovation on work and society, some views on the role and value of the internet can be gauged from data collected in the 2005 British Social Attitudes Survey<sup>109</sup>. This showed that, with regard to the social value of the internet: 65% agreed or strongly agreed that it helped people to keep in touch with people who they could not normally talk to very often; but 44% also thought that it makes people less likely to go out and talk to other people. On the informational value of the internet: 45% agreed or strongly agreed that most of the information available on the

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103 Coyle and Quah (2002) p. 8

104 Ibid

105 Crabtree et al. (2002) p. 63

106 Coyle and Quah (2002)

107 Crabtree et al. (2002) p. 3

108 Coyle and Quah (2002)

109 Park et al. (2007)

internet cannot easily be found elsewhere; while 30% thought that people miss out on important things by not using the internet or email. However, around a quarter of those sampled agreed or strongly agreed with the view that the internet is too expensive or that it is too complicated for someone like them to use fully, with 44% agreeing or strongly agreeing that it was much safer to use a credit card in a shop than over the internet.

Using this and other data from the 2005 British Social Attitudes survey, Curtis and Norris<sup>110</sup> were able to conclude from their analysis that the internet seemed not to have been responsible for “any significant erosion of social ties in Britain” and that “it would appear to make more sense to regard the internet as a facility that people integrate into their social lives... technological change [they concluded] does not necessarily change human beings – but human beings certainly shape how technological innovations are used”.

In order to gauge the economic impact of technology on work and society more generally, it is necessary to explore a broad range of indicators. Three groups of indicator have been identified by Coyle and Quah<sup>111</sup>. The first covers *consumers* and concerns: consumer “take-up” of new technologies, and changes in patterns of economic/work behaviours. *Business indicators* make up the second group and these assess changes in business behaviour, including structural changes involving outsourcing, investment patterns and R&D expenditure. The third group involves *structural changes*: these cover changes in the economic and social infrastructure, including the growth in high technology, creative and service industries, entrepreneurialism, government R&D expenditure, investment in education and training, and growth in skill levels within the economy.

Coyle and Quah<sup>112</sup> argue that data from these groups of indicators offer a source of systematic information when attempting to understand the reach of different technologies in the economy and society, and the types of important changes that are occurring. Nevertheless, it should not be overlooked that consumer demand is fundamental; it is the driving force for work innovation and the incentive for continuous work innovation. The transformation of work and life flows from the way consumers wish to adopt and use different types of technology<sup>113</sup>.

Having considered the changing nature of work itself, our attention now moves to the increasing diversity of the workforce.

### 3.2 Women at work

Today, women make up around 47% of the UK workforce, with about half of these working part-time. Labour Force Survey data shows that in the space of 30 years, women’s participation in the labour market has increased from 10 million in 1971 to 13.2 million in 2001. With the workforce expected to grow continuously but slowly, reaching over 32 million by 2020, the number of women in the workforce is expected to rise further, and at a faster pace than men. In particular, 82% of jobs created between 1998 and 2011 are expected to be taken by women<sup>114</sup>.

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<sup>110</sup> Curtice and Norris (2007) pp. 254–255

<sup>111</sup> Coyle and Quah (2002)

<sup>112</sup> Ibid

<sup>113</sup> Ibid

<sup>114</sup> Williams and Jones (2005)

However, men and women still follow different career paths. This is best illustrated by an analysis of the service sector, where women make up 53% of those employed. In the service sector, 41% of women are employed in the area of public administration, education and health, where they fill 70% of these jobs. Women also make up 51% of all those employed in the distribution, hotels and health sector. In contrast, women are only 44% of those employed in the fastest growing part of the service sector – finance and banking. Women of all ages will continue to enter the workforce faster than men, with expected significant rises for women in the 60 to 65 age group as a result of the equalisation of the state pension age by 2020<sup>115</sup>.

The treatment of the gender gap has been “a high priority for policy makers during the past 30 years”. Yet despite the advances made, “the overall picture is by no means a satisfactory one for many women at work”<sup>116</sup>. If significant change is to occur, then it is important that analysis of the future workforce identifies those aspects of the gap that are changing, and then use these as drivers for economic change<sup>117</sup>. These drivers of change<sup>118</sup> relating to gender include: the increased intellectual capital among women, reflected in higher levels of education particularly among younger women; more women with more experience of employment; the need for flexibility in combining work and caring to reduce interruptions to employment; more policies from employers to achieve effective equal opportunities in an increasingly diverse workforce; and changes in attitude and increased support for women’s employment.

Future economic growth in the UK depends on an increased supply of highly skilled workers. As women will make up the major source of that supply, then to avoid significant difficulties in the future transformations rather than changes need to occur in the workforce. This requires: the restructuring of part-time employment so that it is no longer a “part-time trap” for many; a shift where the provision of care is viewed as an economic investment and a necessary requirement for productivity rather than an issue of welfare; and flexibility that leads to the improved functioning of the workforce, making it more competitive and fairer<sup>119</sup>.

### 3.3 The older worker

The ageing of the workforce is expected to be “the most significant development over the next 15 years”<sup>120</sup>. The steady rise in the average age of the UK workforce began in the late 1980s; between 1991 and 2001 the mean age of the workforce increased by 1.3 years from 37.5 to nearly 39 years. This trend is expected to continue into future decades<sup>121</sup>. By 2010 the proportion of 50-64 year olds in the workforce “will be greater than any time since the mid-1970s... [with this age group becoming] relatively more important for the performance of the workforce as a whole”<sup>122</sup>. Also, employment rates for both men and women aged 50 years and over have increased continuously from 1993, with the increase for women being proportionally greater<sup>123</sup>. It is also interesting to note that that by 2020, the number of people working beyond 65

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115 Madouros (2006)

116 Taylor (2002) pp.13-14

117 Walby (2007)

118 Walby (2007) p. 25

119 Walby (2007)

120 Madouros (2006) p. 16

121 Dixon (2003)

122 Dixon (2003) p. 68

123 Hotopp (2005)



(i.e. who are presently entitled to a state pension) will increase by about 33% compared with levels in 2005<sup>124</sup>.

The distinctive feature about the ageing of the workforce is “that older workers will, in time, constitute a larger share of the labour force than in recent history”<sup>125</sup>. The main issues facing the labour market arising from this shift include: the need to sustain the employability of older workers, particularly those who want to remain in work or cannot afford to “retire early”; the need to ensure that the skill levels of older workers remain relevant; and that the need for organisations to recognise the importance of investing in the training of older workers so that lifelong learning becomes a reality rather than a mantra, ensuring that mobility levels of older workers are capable of adjusting to future changes in the job market<sup>126</sup>.

Organisations should, as Turner and Williams<sup>127</sup> suggest, explore how flexible work patterns for older workers (relating both to time and place) can be managed to maintain the reservoir of experience that would be difficult to replace, and which has been “developed and perfected over time” by these workers. For these authors, part of the solution may lie in “fitting the job” to older workers “through a changed conception of work itself as well as promoting occupational health and work-life balance”. The consequences of ignoring the older worker, their match with the market and their power as consumers, may be an equally high-risk strategy as ignoring their skills and knowledge and the contribution they can make to organisational performance<sup>128</sup>.

### 3.4 The younger worker

Another important trend concerns younger workers in the workforce. Changing expectations, motives and values in this group are likely to influence the nature and character of the workforce over time.

Labour force projections estimate that employment rates for men aged 18-24 in full-time education will “follow an upward trend ... although at a slower rate than in the 1980s and 1990s”. Employment rates for women in full-time education in the same age group have shown a “strong increase in labour market participation since 1984”, and this growth is also likely to continue, but at a slower rate than earlier<sup>129</sup>. The impact of these trends, as Williams and Jones<sup>130</sup> point out, is likely to be manifest as a form of “generation gap”, where younger people will demand greater flexibility at the beginning of their careers in contrast to older working groups.

### 3.5 Immigration and ethnicity

Other trends that are influencing the nature and diversity of the workforce concern immigration and ethnicity. Immigration into the United Kingdom has grown considerably over the past decade with “shifts in the industrial and occupational pattern and in the importance of different nationalities”<sup>131</sup>. In 2005, about 1.5 million migrants were working in the UK, representing 5.4% of the employed population. The different

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<sup>124</sup> Madouros (2006)

<sup>125</sup> Dixon (2003) p. 74

<sup>126</sup> Dixon (2003) p. 75

<sup>127</sup> Turner and Williams (2005) pp. 28–29

<sup>128</sup> Turner and Williams (2005)

<sup>129</sup> Madouros (2006) pp. 12–13

<sup>130</sup> Williams and Jones (2005)

<sup>131</sup> Salt and Millar (2006) p. 352

ways that allow working immigrants to enter the country showed that the 400,000 working immigrants in 2004/2005 represented “the highest officially recorded in Europe except for Germany”<sup>132</sup>. Almost half of these (195,000) were from the newly accessioned states in the EU, with about 60% of them working as process, plant or machine operatives, or in elementary occupations. Approximately 21% (86,000) were permitted to enter under the work permit scheme for three main occupations: nurses and carers; software professionals; and managers and proprietors in other service sectors. Salt and Millar concluded that managed immigration in the future is “likely to be heavily affected by fluctuations in health and ICT recruitment”.

The evolving ethnic mix of the workforce is also leading to changes in the motives, expectations and values amongst people of ethnic background in the working population. According to the Commission for Racial Equality (CFRE), “the ethnic minority share of the working-age population is increasing, reaching 3.26 million in 2004 and is likely to continue to increase”<sup>133</sup>. Data prepared by the CFRE also indicates that in 2004 ethnic minorities made up 7.3% of all people in work. However, this figure hides a much more complex picture with considerable variations in ethnic employment rates between men and women and across age groups, ethnic groups, occupational groups and region. The Ethnic Minority Employment Taskforce<sup>134</sup> continues to work towards ‘the government’s objective that in 10 years’ time, no one should be disadvantaged in their employment prospects because of their ethnicity’<sup>135</sup>. Accordingly, the Government is identifying and tackling specific barriers, and bringing about improvements in educational performance, employment programmes and equal opportunities policies.

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132 Salt and Millar (2006) p. 353

133 CFRE (2006) p. 1

134 Ethnic Minority Employment Taskforce (2004)

135 CFRE (2006) p. 1

## **4 Future work challenges**

**4.1 Government aims and targets: responding to the emotional consequences of work and work stressors**

**4.2 Future work stressors**

**4.3 The future environment for work**

## 4 Future work challenges

The focus of this chapter is on the challenges that are likely to affect the future of work and the wellbeing of employees over the next 10-20 years. In so doing it draws on the foregoing analysis, and also a survey of expert opinion (see Appendix D).

The chapter starts by considering Government targets which relate to work and wellbeing. These targets, and the actions associated with meeting them, will help to shape the future development of work, and therefore form an important backdrop for the ensuing discussion.

## 4 Future Work Challenges<sup>136</sup>

Preceding chapters have considered major changes in the organisation of work and the economy, the introduction of new technology, and the increasing diversity of the workforce. As these factors<sup>137</sup> bring about further changes, they are likely to create tensions in the future: between the way we work; the way we want to live; and our wellbeing. This chapter looks ahead to the next 20 years and discusses the possible tensions and the challenges that these various factors are likely to create, under two main headings: “Future work stressors” and “The future environment for work”. However, before these challenges can be properly considered, it is important to place them in the context of current Government aims and targets, in particular, those which seek to reduce the incidence of work-related ill-health, and the number of working days lost. The chapter starts by considering targets and the rationale behind them (section 4.1).

But first a note of caution: while the trends associated with some of the drivers of change are well defined in the short term, others are less predictable. All become progressively uncertain with time. The development and introduction of new technology is a case in point. Technological developments and their uptake can have a major effect on work and wellbeing, but are impossible to predict far into the future. So, while our discussion may be viewed as an exploration of what is likely to happen in the shorter term, the situation inevitably becomes more uncertain as we look towards 20 years and beyond.

Uncertainty in the future is compounded by the many possible interactions that can occur between individual drivers of change. This Project has therefore developed three hypothetical future scenarios to investigate interactions and uncertainties in the drivers affecting work and wellbeing over longer timescales. The scenarios were designed to be equally plausible, and they essentially sample the future “possibility space”. A description of the scenarios and their use across the Project is beyond the scope of this report, but will be fully described in a separate document (this will be made available through [www.foresight.gov.uk](http://www.foresight.gov.uk)).

### 4.1 Government aims and targets: responding to the emotional consequences of work and work stressors<sup>138</sup>

#### 4.1.1 Job satisfaction

It is clear from the different surveys that job satisfaction has risen since 2000, with many workers indicating that they are “completely”, “very” or “fairly” satisfied with their jobs. Extrapolation of these data suggests that somewhere between 12 million and 21 million working people derive satisfaction from their job. It is also clear that satisfaction seems to come from: the nature of the work itself; opportunities to use initiative; the amount of control over the job; and a sense of achievement.

Where data are available, they show that it is the sense of achievement from a job that has shown the greatest improvement in satisfaction over the last decade. Similarly,

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<sup>136</sup> The discussion of this chapter has also drawn upon a survey of opinions of leading experts. Further information about this material can be found in Appendix D.

<sup>137</sup> These factors are termed “drivers of change” or “drivers” in this report.

<sup>138</sup> “Work stressors” are defined as stressful working conditions.

improvements have also occurred in “task discretion” – employees have reported increased levels of influence over the pace of work and how the work is done<sup>139</sup>. For many people, it is also important to feel that their job enables them to help others and is useful to society. In contrast, the emphasis and importance of intrinsic rewards such as interesting work, being allowed to work independently and being allowed to decide when they work, have remained relatively constant over the years. “Contrary to the popular belief that employment security has declined”<sup>140</sup>, perceptions of job security have continued to improve since 1998 with two-thirds of workers in 2004 strongly agreeing or agreeing that they felt their job was secure<sup>141</sup>. Growing levels of job satisfaction suggest that progress towards the Government goal of “fulfilling employment”<sup>142</sup> is being achieved.

Underlying these data on job satisfaction is the belief that a satisfied employee is a motivated employee. The relationship is, of course, more complex and depends on: individual values; personal goals and their achievement and congruence with organisational goals; and the expectation that demonstrating the skills and competencies to perform at a certain level will be clearly linked to attractive outcomes. To meet employee expectations and demands and to contribute to the quality of working life, satisfaction and motivation, the reviewed data suggests that jobs need to be: interesting and meaningful; and offering opportunities for achievement, the utilisation of skills and scope for using initiative. The surveys cited above also indicate that employees want more control over their working arrangements, particularly in terms of the pace of work and how the job is done. How employees experience work<sup>143</sup> and the satisfaction they derive from it, is acknowledged as a key indicator of wellbeing<sup>144</sup> and a significant influence on motivation and performance. Policy developments that continue to recognise “as important in its own right” the quality of the work experience, represent significant steps in meeting the Government aim of providing “fulfilling employment”<sup>145</sup>.

#### 4.1.2 Work stressors today

Although surveys of job satisfaction show that many workers experience high levels of satisfaction, they also show that many employees are neither “satisfied” nor “dissatisfied”. These findings suggest that these workers experience feelings of disengagement or disenchantment, where work has simply become a means to an end. Extrapolating the trends identified in the surveys suggests that there are currently several million employees who find work or aspects of it “dissatisfying” or “very dissatisfying”. How long and in what way these employees can continue to work in such jobs must eventually have a significant impact on their health and wellbeing.

The bluntness of measures of job satisfaction means that we need to look elsewhere to understand how feelings of dissatisfaction are manifested. For example, HSE<sup>146</sup> data indicates that 420,000 workers in Britain believed they were experiencing stress, depression or anxiety at levels that were making them ill. The 2005 Workplace Health

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139 Brown et al. (2006)

140 DTI (2006) p. 7

141 Brown et al. (2006)

142 Ibid

143 CIPD (2007c)

144 Brown et al. (2006)

145 Brown et al. (2006) p. 5

146 HSE (2007a)

and Safety Survey<sup>147</sup>, which was designed to provide a source of information on workplace hazards, found that 12% of employees found their jobs “very” or “extremely” stressful and a further third “moderately” stressful. The WERS 2004 data measured stress by the extent to which employees worry about work outside of working hours: this showed an increase in stress over the period 1998 to 2004 of 2.5% or about 675,000 employees – with 27% of employees in 2004 “agreeing” or “strongly agreeing” that they worried a lot about work outside of office hours<sup>148</sup>. The 2004 WERS survey used two other measures of stress over the same period and found in contrast there was little change in these. However, the percentage of employees who “agreed” or “strongly agreed” with the extent “to which their job requires them to work hard” and that “they never seem to have enough time to get work done” remained high at 76% and 40% respectively<sup>149</sup>. Added to this is the data from the 2005 Workplace Health and Safety Survey,<sup>150</sup> which indicated that the most “widespread workplace hazard is stress” with an estimated 22% of the working population reporting that they were “quite” or “very” concerned that it is stress that might cause them harm at work. A high proportion of those respondents (14%) thought that this risk had increased over the past year<sup>151</sup>.

#### 4.1.3 Government targets

The levels of stress described above, have led to a strong commitment by Government Departments<sup>152</sup> to reduce ill-health caused, or made worse, by work and to use the work environment to help people maintain or improve their health. By 2010, relevant government agencies aim to work together to achieve a number of targets that include reducing the incidence of work-related ill health by 20% and reducing the number of working days lost due to work-related ill health by 30%<sup>153</sup>. These “headline targets” are “designed to focus and inspire action” with the hope that if successful, then the actions taken and the strategies put in place could save society between £8.6 – 22 billion by 2010<sup>154</sup>. These savings reflect not just the gains that can be derived by reducing absenteeism caused by work stress, but by tackling what researchers now describe as “presenteeism”, where employees continue to work, but at reduced capacity, because of their ill-health or heightened psychological stress. The link between work stressors and poor wellbeing is clear, and evidence of the consequent costs for performance and productivity continue to grow<sup>155</sup>.

## 4.2 Future work stressors

Using the work environment to help people maintain or improve their health requires the identification of those working conditions (stressors) that are stressful. However, it is important to remember that not all stress is bad, and that jobs need to be challenging and demanding so that individuals can maximize their potential, utilise their skills and abilities, and flourish. It is when the individual perceives that working conditions are about to tax their physical and psychological resources that stress results<sup>156</sup>.

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147 Hodgson et al. (2006)

148 Brown et al. (2006)

149 Ibid

150 Hodgson et al. (2006)

151 Ibid

152 DH (2004); DWP (2005); HSC (2000)

153 HSC (2000) p. 1

154 HSC (2000) pp. 1, 13

155 Brun (SR-C2) – see Appendix C

156 Murphy (SR-C1) – see Appendix C

In the future, two issues will need to be confronted if targets are to be reached. They concern the nature of work stressors and their consequences and, in particular, how stressors are measured. First, there needs to be less focus on the somewhat blunt way in which “stress” is measured, and more on measuring and understanding the emotions associated with different stressor conditions. This shift of emphasis will enable specific causal pathways to become clearer, and will enhance understanding of the impact of work stressors. In turn, this approach has the potential to lead to intervention strategies that are more focused. Secondly, it will be important to measure both the objective nature of work stressors and also the meanings individuals give to these conditions: it is on the basis of these meanings and the way the individual appraises the situation that coping strategies are initiated.

#### 4.2.1 Qualitative work overload

It is clear from reviews commissioned by this Project (see Appendix C) that many of the work stressors that have been measured will continue to have an impact on employee wellbeing in the future. These include work overload, interpersonal conflicts, participation and control and job content. However, the nature of these stressors is likely to change in the future.

Work overload, for example, will continue to be described in quantitative terms (e.g. too much work to do with too few resources, too many interruptions, working long hours). But it will also have a qualitative dimension, which focuses on the “cognitive” aspects of the job. Here stress is expected to arise as a result of a more continuous learning requirement, which may involve new skills for new aspects of the job, arising from more sophisticated software and technological innovations. At other times stress may arise as a consequence of the need for more technical knowledge, because of complex and changing legislative requirements; or because of the necessity regularly to engage in professional development and to respond to career-related requirements.

Despite the obvious advantages of new technology for both individuals and organisations, O’Driscoll and O’Driscoll<sup>157</sup> raise serious concerns about the potentially damaging influence that the use of information and communication technology (ICT) can exert upon the wellbeing of individual workers. The negative outcomes of consistent technological change have given rise to a phenomenon which has been labelled “techno-stress.” This “techno-stress” includes experiences which typically relate to: an individual’s anxiety about his or her ability to use technology effectively; frustration due to problems or limitations in technology which prevent goal attainment; depression arising from long-term perceived inability to cope with advanced technology, plus perceptions of job insecurity due to technological change; and general negative mood states. In addition there is accumulating evidence that ICT reduces meaningful social interactions between individuals, even within the same organisation, and hence creates feelings of social “isolation.”

#### Workplace bullying

In the future, inter-personal conflicts at work are more likely to extend beyond traditional role conflicts to encompass behaviours such as bullying and harassment, fear and violence. A wide range of behaviours fall under the definition of bullying at work, for example: harassment; mistreatment; hostility; and aversive behaviours<sup>158</sup>. Bullying is

<sup>157</sup> O’Driscoll and O’Driscoll (SR-C5) – see Appendix C

<sup>158</sup> Beswick et al. (2006)



more generally defined as “those situations when an unequal balance of power exists between two individuals in a conflict situation”<sup>159</sup>. As the CIPD<sup>160</sup> makes clear, there is “a fine line between firm autocratic management styles and bullying”, with bullies generally unaware of the negative impact of their actions. The CIPD report goes on to suggest that the cost of bullying in the UK is upwards of £2 billion each year, taking up nearly 450 days of management time, and with devastating effects on victims. It is viewed as “a more significant cause of mental health problems than the other common workplace stressors”<sup>161</sup>.

Although bullying is hard to measure, and the incident rates for bullying vary across surveys, estimates suggest that between 1 to 4% of employees in Europe are subject to bullying at work<sup>162</sup>. “Dignity at Work” initiatives, the development of measurement tools and building a culture at work “where appropriate ways of behaviour are clearly communicated and supported”<sup>163</sup> have all been identified as useful strategies to combat bullying. While 83% of employers have an anti-bullying policy in place, changing entrenched patterns of behaviour is a difficult task which cannot be ignored<sup>164</sup>.

### Violence at work

With more and more people working in the service sector where client contact is a critical part of the job, incidents of workplace violence are rising. The Union of Shop, Distributive and Allied Workers reported research in the retail industry which reveals that every minute of the working day, a shop worker is verbally abused, threatened with violence or physically attacked<sup>165</sup>. This report goes on to mention that in 2006 there were over 10,000 physical attacks on shop workers and 62,000 reported incidents of verbal abuse. While these figures are lower than the previous year, partly due to Usdaw’s “Freedom from Fear” campaign and their work with employees, verbal abuse of staff has “reached epidemic levels, from ranting and raving through to specific threats of violence”<sup>166</sup>.

The trade union UNISON also reports that work-related violence is a widespread problem across all sectors and a major occupational hazard for many members. It is therefore unsurprising that the 2005 Workplace Health and Safety Survey<sup>167</sup> estimated that one worker in 14 (7.1%) was “quite” or “very” concerned about being physically attacked or threatened by a member of the public while at work. Moreover, only those who had experienced threats or an attack at work during the last year (21%) were asked to express their concerns about this risk. This led the authors of the survey to suggest that this percentage could be higher when the total number of workers who deal directly with the public is considered. Of those who had actually experienced being attacked or threatened, 37% thought that this risk could realistically be reduced, although many thought that the risk had increased rather than reduced over the past year<sup>168</sup>.

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159 CIPD (2005) p. 5

160 CIPD (2005) p. 3

161 CIPD (2005) p. 15

162 Beswick et al. (2006)

163 CIPD (2005) p. 45

164 CIPD (2005)

165 Usdaw (2007)

166 The Guardian (2007)

167 Hodgson et al. (2006)

168 Ibid

The HSE report on violence at work<sup>169</sup> reports that the British Crime Survey (BCS) indicated that there were approximately 340,000 threats of violence and 320,000 physical assaults on British workers by members of the public during the 12 months prior to the review. While these figures are similar to earlier years, the 2002/2003 BCS noted that 12% of workers said that they were “very” or “fairly” worried about assaults whilst 15% said they were “very” or “fairly” worried about threats at work. While the HSE 2006 violence at work guide<sup>170</sup> points to different parts of health and safety law relevant to violence at work, it also points to and describes a “four-stage management process for effective management of the problem”. Nevertheless, it seems there is still much work to be done, as there is little evidence-based certainty as to what really “works” in terms of a training curriculum<sup>171</sup>.

#### 4.2.4 Work systems and flexible working

The last decade has seen many organisations engaging in some form of re-engineering of business processes. While the drive to improve productivity and reduce costs has resulted in much restructuring, global competition and changing labour markets have ensured that the most significant competitive advantage of an organisation lies in the competencies of its employees. This has led to the growth in so called “resource-based strategies”, where competition is furthered by placing even greater demands on employees in terms of their competency to produce, and their motivation to do so. The 2006 CBI survey of employment trends<sup>172</sup> clearly indicates that 40% of employers regard “people management” as the key factor contributing to business competitiveness, with 41% of those surveyed indicating that effective people management is central to future performance.

Competing through people management operates as a double-edged sword. Jobs can be motivating and satisfying when challenging and meaningful, and when they give employees the opportunities to use their skills, to influence how they work and control the pace of work. Designing jobs that optimise these characteristics not only allows employees to flourish, but also to experience “flow”<sup>173</sup> – where an employee is fully using their skills successfully to deal with a challenge.

However, it is also clear from the CBI survey that the potential for dissatisfaction and stress are at their greatest when jobs constrain: the control that employees exercise over their work; the flexibility to manage their working arrangements; the challenges they get from work; their engagement at work; and the spill-over between work and life. Content and context issues surrounding the job require employees to attend to the psychological contract and to the management of the exchange relationship relating to expectations and promises between employee and employer. When employees feel that their psychological contract has been broken, then this sense of injustice and unfairness inevitably leads to perceptions about the job and management that have consequences for stress and wellbeing.

One of these “exchanges” that needs managing is the potential mismatch between the aspirations of employees for flexible working arrangements and shortcomings in their provision. For some time there has been a sense that through the different technological innovations, there would be “a greater range of possibilities for work in

169 HSE (2007b)

170 HSE (2006b) p. 2

171 Leather and Zarola (SR-CI 1) p. 8 – see Appendix C

172 CBI (2006a)

173 Csikszentmihalyi (1975)

the future [with] some consensus that employees would not be restricted by their work, instead they would make it adapt to them”<sup>174</sup>.

The CBI in their report “The best of both worlds: A guide to flexible working”<sup>175</sup> also notes that the pressures for flexible working will continue to grow “from a changing work force which is more diverse than in the past [concluding] that the benefits of flexible working are mutual”. The CBI<sup>176</sup> goes on to comment that for flexible working arrangements to work: the involvement of the employee is essential; that training eases the change to more flexible working; and that trust and confidence between employer and employees is a key success factor. The Equal Opportunities Commission calls for new models of flexible working and encourages the idea of more sustainable practices which explore flexibility in broader terms – that embrace issues of time dependency and location dependency. The urgent requirement for the future is the “need to give greater control to workers in all types of jobs [and] only if this transformation occurs will employment really be sustainable for the 21<sup>st</sup> century needs”<sup>177</sup>.

#### 4.2.5 Coping and stress management

By defining stress in transactional terms, attention is focused on secondary appraisal and the concept of coping. For a considerable time, researchers have been interested in how individuals cope under stress at work. Traditionally research has focused on how best to classify individual coping strategies and their functions. As a result, the most well known classification<sup>178</sup> distinguishes between *problem-focused coping*, where attempts are made to deal with the demands of the situation and *emotion-focused coping*, where attempts are made to deal with the emotions that result from such demands.

However, evaluating the effectiveness of coping strategies is a complex issue, and often has to be explored in terms of “for whom and at what cost.” Nevertheless, it is clear that coping depends in part on the availability of organisational resources, and ability of the individual to use them. Intervention strategies must therefore pay particular attention to the availability of resources by providing opportunities for: training; developing support structures and suitable climates for the promotion of wellbeing; and communicating the importance of wellbeing. Strategies also need to address resource depletion through poorly designed jobs, the pace of work, and failing to meet expectations. Stress does not reside solely in the individual or solely in the work environment, but in the transaction between the two – intervention strategies that treat the individual and the environment in isolation fail to grasp the nature of the stress process and where the responsibility for intervening lies.

Research in the future will continue to explore problem-focused and emotion-focused coping, particularly in terms of their potential: to improve the quality of working life; to enable individuals to develop a sense of self-worth; to mobilise confidence; and to promote health and wellbeing. Research will also continue to investigate how different coping strategies are used, how they combine, the patterns they take in relation to different stressors and emotions, and what criteria individuals use to evaluate coping effectiveness.

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<sup>174</sup> EOC (2007a) p. 22

<sup>175</sup> CBI (2006b) p. 5

<sup>176</sup> CBI (2006b) p. 7

<sup>177</sup> EOC (2007a) p. 37

<sup>178</sup> Lazarus (1991)

There will also be a shift in focus as research on coping is influenced by the growing interest in positive psychology, and therefore explores the qualities of positive coping and the positive emotions associated with it. Positive coping is concerned with strategies that are forward-looking and oriented more to the future. It is best expressed through what has become described as *proactive coping*. Proactive coping is defined as “an effort to build up general resources that facilitate promotion toward challenging goals and personal growth”<sup>179</sup>. In this way proactive coping is distinguished from *reactive coping* which aims to deal with a situation that has happened, *anticipatory coping* which addresses an impending demand, and *preventative coping* which concerns preparations to deal with possible demands. The boundaries between these different forms of coping blur when set within a stressful encounter, simply because all forms of coping can have positive results. The person who copes proactively is described as one who “strives for improvement of work or life and builds up resources that assure progress and quality of functioning”<sup>180</sup>.

The 2005 Employer Survey Report from the Workplace Health and Safety Survey Programme<sup>181</sup> indicated that an estimated 94% of workplaces undertook health and safety risk-assessments. The same survey showed that managers were generally committed to developing a climate of good health and safety: over a third strongly agreed that workers need to be fully involved when developing health and safety rules and procedures; and just over 40% strongly agreed that their workers were clear about health and safety rules and procedures and knew how to apply them. Interestingly, the report authors note, “that [whilst] work-related stress is the second most prevalent self-reported work-related ill-health condition, only 3% of workplaces rank stress as one of their top three most common risks and the same proportion rank it as one of their three most severe risks”<sup>182</sup>. Difficulties surrounding how best to manage work-related stress may help to explain the finding that the “risk of stress was reported to be less well controlled than for other hazards”. This reflects a trend, where the acknowledgement that more action needed to be taken was associated with a poorer assessment of risk control.

As Semmer<sup>183</sup> points out, two basic approaches dominate interventions for stress in the workplace. These are person-focused stress management training and work-environment organisation-focused interventions. In the 1990s, the HSC also initiated an extensive consultation process exploring how work-related stress should be tackled. The outcome was the development of “clear, agreed standards of good management practice [that] are essentially based on a method of controlling hazards [where] the emphasis is on prevention towards reducing stress in the UK working population”<sup>184</sup>. The management standards provide, through use of an “indicator tool”, an opportunity to achieve continuous improvement across six key stressor areas. For interventions aimed at workplace stress, the emphasis is on prevention through thorough risk analysis and assessment. Risk analysis is best achieved by viewing stress as a transaction between the individual and the environment, thereby combining both person- and organisational-focused orientations into any intervention programme.

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179 Schwarzer (2001) p. 406

180 Ibid

181 Clarke et al. (2005)

182 Clarke et al. (2005) p. 6

183 Semmer (SR-C6) – see Appendix C

184 Mackay et al. (2004) p. 91

Developments in the future will require as much attention to be given to developing “wellness” as has been given to strengthening individual capacities for and resistance to stress. More attention can be expected to be given to proactively identifying why individuals believe stress *may* cause them harm, as is currently given to identifying specific stressors. This will also imply the need to develop tools for early diagnosis and prevention of stress. Process issues are also likely to assume an even greater level of importance with audit trails clearly identifying the type of data collection and its adequacy, its analysis, programme review, and particularly, programme evaluation.

### 4.3 The future environment for work

#### 4.3.1 Learning and development

Following the restructuring of the UK economy to become knowledge-based, today “we sell more knowledge services as a proportion of our total exports than any other major economy”<sup>185</sup>. In 2007, the UK exported about £75 billion in knowledge services and the trade surplus they generated had already grown to 3.3% of GDP by 2005. From 2002, export growth of knowledge services has remained at around 6.3% of GDP.

However, a knowledge economy relies on organisations to make best use of their “knowledge or intangible assets.” This investment is not just in areas of R&D and IT, design, innovation and branding, but also in training the workforce and at times, changing the way organisations work<sup>186</sup>. Investment “in higher education is essential to sustain the ability of the UK to do well in knowledge-based exports [but] knowledge industries do not depend just on graduate level skills; the strengthening of non-graduate skills development is also important”<sup>187</sup>. This sentiment is echoed by Taylor<sup>188</sup>, where “high skill/high performance workplaces need qualified employees but also employees who are motivated and given discretion and autonomy over their jobs and their career prospects”.

The National Employer Skills Survey 2007 report<sup>189</sup> estimates that employer expenditure in the 12 months prior was £38.6bn. Of this total figure, £20.3bn was spent delivering on-the-job training, with the remainder (£18.4bn) being spent on off-the-job training. This spend raises two questions: what are organisations doing to further employee development; and as the raising of work skills in Britain continues to attract the interest of policy makers, what is the state of skills utilisation in the workplace?

On the first question, it was mentioned earlier that competitive advantage rests partly on competing through people, and the competencies of employees are the key to organisational success. Training and development might therefore be expected to play a more significant role in organisations today than in the past – or is the catchphrase, “people are our best assets” more rhetoric than reality? The CIPD 2007 survey of HR trends and prospects<sup>190</sup> presents some encouraging signs. Two thirds of respondents thought that learning and training was now taken more seriously by senior managers and line managers, and about half thought that learning and development departments

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185 Brinkley (2007)

186 Ibid

187 Brinkley 2007) p. 26

188 Taylor (2003) p. 11

189 Learning and Skills Council (2008)

190 CIPD (2007b)

were gaining greater credibility. Also, 80% thought that training activities were delivering greater value to the organisation than they were able to demonstrate. This, of course, raises the question of whether more attention needs to be given to how well training is evaluated. However, while the role and importance of training evaluation remains a contentious issue (e.g. how detailed, and what is more important: “elaborate metrics” or management support for training), all agree that training should be clearly aligned to organisational strategy. The key to success, argues Taylor<sup>191</sup>, “lies in ensuring that the demand for training becomes linked inextricably to the work organisation inside companies”.

Nevertheless, data from the CIPD 2007 learning and development annual survey<sup>192</sup> showed that about 23% of learning and development specialists did not believe that line managers were supporting training as seriously as they might, despite the crucial nature of their role. Therefore, if organisational training and learning are to be the powerhouse for competing in the knowledge economy in the future, then organisational commitment to raising skills and developing staff must be maintained. This requires organisations to recognise the fundamental importance of the line manager in having responsibility for staff development, and providing training accordingly<sup>193</sup>.

Three other issues need to be addressed if the future potential from training is to be realised. The first is the need to continue to ensure that training is allied to organisational strategy with a clear role for evaluation. There also needs to be clarity about the consequences for organisational success if training policy is not properly thought through. The second issue is that if, as Sloman<sup>194</sup> suggests, the shift is from training to learning, relationships will need to be established between human resource professionals and the organisation. A better understanding of how learning in organisations takes place will also be required. The third issue is whether it is now timely to develop a means of valuing human resources, that not only captures the nature of the worth of employees, but also the added worth that they contribute to the organisation.

Improving work skills is at the heart of competing in the global economy. The data collected in the 2006 Skills Survey<sup>195</sup> give a comprehensive and longitudinal picture of the progress made in the UK between 1986 and 2006. The data show that “job skills have risen significantly according to almost all items and indices derived from the data series”<sup>196</sup>. Qualification level for entry into jobs has risen steadily since 1986 with the proportion of jobs requiring level 4 (degree) qualification entry requirements now reaching 30%. Similarly the proportion of jobs not requiring qualifications fell by 11% over the same period. On average, jobs in 2006 are associated with longer periods of training, and the increase in job complexity means that the proportion of jobs requiring less than one month “to learn to do well” has fallen from 27% in 1986 to 19% in 2006<sup>197</sup>.

While since 1986 there has been an increase in skill usage across all the skill areas in the UK, the use of “influence skills” (communicating, analysing and persuading) and literacy skills have shown the greatest increase. Jobs requiring “influence skills” pay a

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191 Taylor (2003) p. 18

192 CIPD (2007a)

193 Ibid

194 Sloman (SR-C9) – see Appendix C

195 Felstead et al. (2007)

196 Felstead et al. (2007) p. 3

197 Felstead et al. (2007) p. 4

premium over and above the rewards to education and training. There has been, the survey authors report<sup>198</sup>, “a marked and sustained increase in the proportion of people who report that computing is an “essential” part of their job [with] all forms of internet use becoming more prevalent”. The data also suggest that workplaces are becoming a significantly important “driver for learning” with greater proportions of respondents strongly agreeing that “their job requires that they keep learning new things” and “their job requires that they help colleagues to learn new things.” The importance of being able to make use of abilities and initiative at work was ranked higher than pay and there was no evidence of any decline in the relative importance of intrinsic job features. Almost two-thirds of employees wanted training in the future, with most desiring vocational or professional qualifications. Training was seen<sup>199</sup> as a way of increasing job mobility, of providing a sense of personal achievement and of improving job performance. However, while skilled jobs require higher levels of discretion over job tasks, and despite the rise in skill levels, the authors of the report point out there has not been a corresponding rise in the level of control that employees can exercise over their jobs.

The future is, in many ways, well mapped out. At the centre is the Leitch Review of Skills in England<sup>200</sup>, and at the heart of this review is the view that having a highly-skilled workforce is not an optional extra but an economic necessity. However, while Leitch notes that good progress has been made on skills and employment, the productivity gap with our major competitors still needs to be narrowed further: this would come through skill development and by embedding of the values of skills in such a way that everyone accepts personal responsibility to improve their skills throughout their lives. Nevertheless, as Taylor<sup>201</sup> points out, there is still a gap because “few firms are really giving a top priority to the need for the creation of a high skills/highly qualified workforce because their basic business activities do not require them to do so”. The Leitch Review responds to this need with its main focus on training and skills for adults, and its emphasis bridging this gap by more “employer engagement” through education and learning.

So, while policies are being initiated to ensure that young people have a better start, the emphasis in Leitch is on adult learners, because 70% of the 2020 workforce is already beyond the age of compulsory education. This focus on adults will place an increased emphasis on part-time provision, both for mature students taking first time qualifications and for vocational postgraduate training and education. Employers will play an important role in leading the way on skills, and with policies designed to raise employer ambition and investment at all levels. Opportunities for employers to support staff in acquiring skills will be offered through the principle of demand-led training, where employers and learners would be given the purchasing power to decide what sort of training best suits their need.

The role of higher education in developing employment engagement strategies will be crucial. The CBI 2006 survey on employment trends<sup>202</sup> notes “that increasingly, employers collaborate with universities designing and delivering bespoke courses for employees” and that they are generally satisfied with delivery (45%), relevance and course content (69%) and the quality of trainers (69%). However, training alone is not

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198 Felstead et al. (2007) p. 40

199 Felstead et al. (2007) p. 7

200 DIUS (2007)

201 Taylor (2003) p. 6

202 CBI (2006a) p. 35

sufficient to improve the UK skill base. Employers also need to give employees the opportunities to apply them in the workplace.

#### 4.3.2 Careers

The Warwick Institute for Employment Research (WIER)<sup>203</sup> has explored working futures from 2004 to 2014 and presents a generally optimistic picture for the UK. Employment is expected to continue to rise by just under half a per cent per annum, resulting in over 1.3 million additional jobs by 2014. These employment prospects to 2014 will depend upon the demand for goods and services, with corresponding increases in employment in distribution and transport, business and other services, including non-marketed services (such as social work and the public provision of education and health).

On occupational prospects, the WIER reports that the groups that are expected to show significant increases in employment over the next decade are: managers and senior officials; professional occupations; associate professional and technical occupations; and sales, customer and personal service occupations. These changes, coupled with growing global competition, workforce diversity and technological innovation, prompt questions about the ability of organisations to be able to offer and sustain the notion of a career for employees. Three issues will confront individuals and organisations: how will careers be structured?; what is needed for effective career guidance?; and what criteria should be used to evaluate career success?

Careers, as currently understood, involve some degree of organisational tenure coupled with the concept of upward mobility, where the individual, generally through promotion, makes their way up through the organisational hierarchy. Data from the 22<sup>nd</sup> British Social Attitude Survey<sup>204</sup> suggest that 63% of employees believe that their employer is “very” or “fairly” good in keeping them informed about plans for future employment, and a similar number (62%) believe that their employer is “very” or “fairly” good at keeping them informed about training opportunities to advance their career. Nevertheless as organisations restructure and hierarchies give way to networks offering different types of employment arrangements, then this throws into question the type of careers that organisations can offer and the sort of career opportunities individuals can expect or want. These changes have, as Kidd<sup>205</sup> suggests, given rise to the idea of “boundary-less” careers, involving sequences of job opportunities which will allow individuals to redefine the nature of career boundaries. Employees will take more responsibility for their career, becoming more conscious of the need to develop skills to manage it. Workforce diversity, demands for greater flexibility in working arrangements and organisational change will all continue to place demands on career expectations and opportunities – and whether and how these expectations and opportunities “fit” with contemporary organisational structures.

Because the strategic economic role of career guidance has been emphasised<sup>206</sup>, research and practice have begun to shift towards understanding what makes career guidance more effective. Research by the WIER<sup>207</sup> found that “useful guidance” requires “supporting positive outcomes for clients, giving clients access to relevant sources of

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203 WIER (2006)

204 Park et al. (2005)

205 Kidd (SR-C10) – see Appendix C

206 By the DTI and the more recent public investment to improve guidance for adults through support for information, advice and guidance (IAG) services with the intention of developing a learning society; WIER (2005), p. 1

207 WIER (2005) p. 3



information, encouraging constructive change in the client and providing the client with a positive experience". The research also identified characteristics of "effective" guidance, which included establishing a working alliance, exploring potential, identifying options and strategies, and following through the need for: greater understanding of effective guidance; how this information is shared; and how research and practice can be brought closer together.

The other issue that will attract the attention of both researchers and practitioners is how career success will be judged in the future. The markers of career success are firmly attached to more traditional organisational structures. So, if these structures are changing and creating new types of career expectations and opportunities, then their evaluation will require new markers and different criteria that reflect the diversity of the workforce, the aspirations of individuals and the opportunities provided by organisations.

### 4.3.3 Management

Barling and Carson<sup>208</sup> argue that it will come as no surprise that research has identified a linkage between poor quality management and leadership, and reduced wellbeing. Data from the 2005 British Social Attitude Survey<sup>209</sup> shows a level of goodwill between employees and management with about 40% of employees describing their relationship with management as "very" or "quite" good, and around a third "strongly agreeing" or "agreeing" that they are proud to tell people: which organisation they work for; that they share many of its values; and that they feel loyal to their organisation. The employees were also asked to rate how well managers in their workplace were at: seeking the views of employees; responding to employee suggestions; and allowing employees to influence decisions. Here the percentages that rate managers as "very good" or "good" for the three questions were 25%, 23% and 16% respectively. So it is clear what employees want from work: in general they want jobs where the opportunity to advance is high; the work is interesting, varied and useful; they can work independently, utilise and improve their skills; and have influence over how they work.

Results from the CIPD 2007 'barometer' overview of surveys<sup>210</sup> (which used 2006 data) supported the view that employees with a positive view about their managers "are those who are most engaged with their work, perform better and less likely to quit their jobs". Nevertheless while the CIPD survey reported a 40% level of satisfaction between employees and managers, they also reported some worrying findings: a similar level of employees were dissatisfied with their relationship with their manager (43%); dissatisfied with promotional opportunities (55%); rarely made to feel that their work counts (25%); and rarely or never got feedback on their performance (30%). So if high-quality management and leadership have a positive impact on wellbeing<sup>211</sup>, then the issues facing organisations in the future include: identifying leadership styles that allow individuals to flourish; recognising the contribution "people management" and highly-performing human resource techniques can make; and ensuring that future working relationships are built around partnership.

As Barling and Carson<sup>212</sup> point out, high-quality leadership is often associated with what is described as transformational leadership – where leaders, by establishing a clear

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208 Barling and Carson (SR-C3) – see Appendix C

209 Park et al. (2007)

210 CIPD (2007b) p. 21

211 Barling and Carson (SR-C3) – see Appendix C

212 Ibid

vision, inspire, challenge and motivate employees to engage in discretionary behaviours that produce effort and performance which go beyond what would normally occur. Two elements of transformational leadership appear to be crucial to developing the environment that would allow individuals to flourish and to provide the opportunities to achieve the type of working relationship that they find motivational: intellectual stimulation and personal consideration. These two elements seem to capture the spirit of what individuals want from their jobs, and what reflects an environment that stimulates and motivates. *Intellectual stimulation* refers to a challenging environment, where individuals are encouraged to utilise their skills and abilities to search for solutions and solve problems in new and creative ways. *Personal consideration*, however, emphasises individual development by paying close attention to positive support through mentoring, coaching and sharing of information. Leadership is, of course, a complex issue and requires, at the very least, some form of agreed transaction where performance levels are established and rewards clearly identified. Leadership applies to all levels of the organisation and leadership styles in the future should embrace behaviours that support employees in identifying their skills and abilities, and create working environments that provide opportunities for these personal strengths to be developed in an engaging and meaningful way.

However, positive leadership is not, by itself, enough. It must be embedded in strong human resource practices. The CBI 2006 survey of employment trends makes it clear that effective “people management” is the key factor contributing to business competitiveness, with 41% of respondents citing it as central to future performance. Employers recognise “that soft skills and ‘people factors’ are a unique source of competitive advantage that can have a positive impact on business performance”<sup>213</sup>. When respondents in the CBI survey were asked what they thought were the most important aspects of people management, half (52%) believed that management skills were the most important followed closely by workforce skills (50%). Added to these two were flexible working patterns (33%), the use of multi-skilled teams (32%) and skill utilisation (29%).

Looking to the future, the CBI survey suggests that management skills are still the most important aspect of people management followed by multi-skilled teams, flexible working, and skill utilisation. As globalisation and technological change continue to intensify “people and tacit knowledge are likely to become increasingly important [with] human resource factors – particularly management skills and development [becoming] even more crucial”<sup>214</sup>. The 2007 CBI survey of employment trends<sup>215</sup> reinforced this view, “highlighting effective people management as the most important issue for competitiveness”, with over half (55%) of respondents identifying good management skills as the key HR factor affecting their business. The CIPD 2007 report on a barometer of HR trends and prospects<sup>216</sup> is consistent with this, as it argues that the future requires the “speeding up of human capital management.”

Progress must be made in “two very important areas.” These are in developing and progressing human capital metrics and measurement, and “a greater emphasis on the ‘human’ in human resources as expressed in the form of employee engagement and organisational cultures”<sup>217</sup>. Strategic performance depends on good human resource

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213 CBI (2006a) p. 9

214 CBI (2006a) p. 10

215 CBI (2007)

216 CIPD (2007b)

217 CIPD (2007b) p. 26

data; particularly the development of metrics that measure the impact of human resource techniques on organisational performance, acknowledging the future role of human resource accounting. Employee engagement requires the translation of human resource policies into practice. The important element here is partnership with all levels of the organisation working together as partners, so that “employees experience the benefits and voluntarily commit to go the extra mile and raise their performance”<sup>218</sup>. The ingredient that makes partnerships work is communication leading to the development of new approaches to workplace relationships. Partnership at work, as Taylor<sup>219</sup> argues “should no longer be regarded simply as a well-meaning slogan”; it is the basis through which organisations develop trust and commitment.

#### 4.3.4 Work-life balance

The commitment to improve the work-life balance of individuals is reflected in a series of legislative changes over the last two decades. Over this time, particularly as the workforce has become more diverse and developments in technology have offered opportunities for alternative working practices, the reasons behind and the motivations for work-life balance have become as much to do with the ways of 21<sup>st</sup>-century living as they are (and have been) about caring responsibilities. These developments have a number of implications for the future.

The first of these is the need to develop further our understanding of the reasons for more flexible working arrangements<sup>220</sup>. Surveys have already identified a range of reasons why employees wish to work flexibly, and which seemingly go beyond caring responsibilities. These include what may reflect “lifestyle” opportunities that give more free time, more time with the family, and simply because it makes lives easier and more manageable. This knowledge should “encourage a much broader discussion, and place the issue [of work-life balance] firmly within the context of the wider political economy”<sup>221</sup>. In this way the policy debates and agendas on work will need to consider: the intensification and nature of work as it affects all employees; offering a more transformational response to the “myriad of different work experiences”; and addressing the broader realities of the contemporary workplace<sup>222</sup>. At the very least, such debates will encourage a more widespread adoption of flexible practices in those sectors of employment growth where employees do not currently enjoy an optimal work-life balance.

As the range of flexible working arrangements continues to grow, more attention will need to be given in the future to their management<sup>223</sup>. The CBI guide to flexible working<sup>224</sup> identifies three important steps in the management process. The first covers employee involvement and is concerned with making use of employee experience in exploring the impact of different arrangements, and identifying what employees want and how it can be accommodated. The second step recognises that training is crucial and becomes important at two levels: first, in preparing and training employees for what may be involved when taking up different forms of flexible working; and secondly, in recognising the need for managerial training, not just on the practicalities of dealing with flexible working, but more importantly that flexible working requires different

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218 CIPD (2007b) p. 26

219 Taylor (2005) p. 22

220 Giga (SR-C7) – see Appendix C

221 Taylor (2001) p. 7

222 Taylor (2001)

223 Westman (SR-C4) – see Appendix C

224 CBI (2006)

styles of management and therefore training. The third step requires the development of trust and confidence between employers and employees, ensuring that the ensuing autonomy is not exploited.

These steps may have a number of potential future spin-offs. The first is that they will identify unmet demand, where an employee does not have access to a particular arrangement but would like the opportunity to do so. The second is that such steps may help to counter the communication gap or mismatch in knowledge, between what is perceived to be available and what actually is available, and so avoid the dissatisfaction that inevitably follows. Thirdly, these steps will offer the opportunity to review and develop new models of flexible working that not only consider flexibility in terms of time and location, but also in terms of meeting and addressing different circumstances, thereby moving away from standardised practices that can be prescriptive and restraining. And finally, they will highlight the multiple benefits of such arrangements which have the potential to extend across people's lives. These include helping to reshape leisure, improve wellbeing and health, and offering opportunities for individuals to recognise that growth and self-actualisation can be derived from other spheres of life and are not simply confined to work<sup>225</sup>.

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225 Haworth and Roberts (SR-C8) – see Appendix C

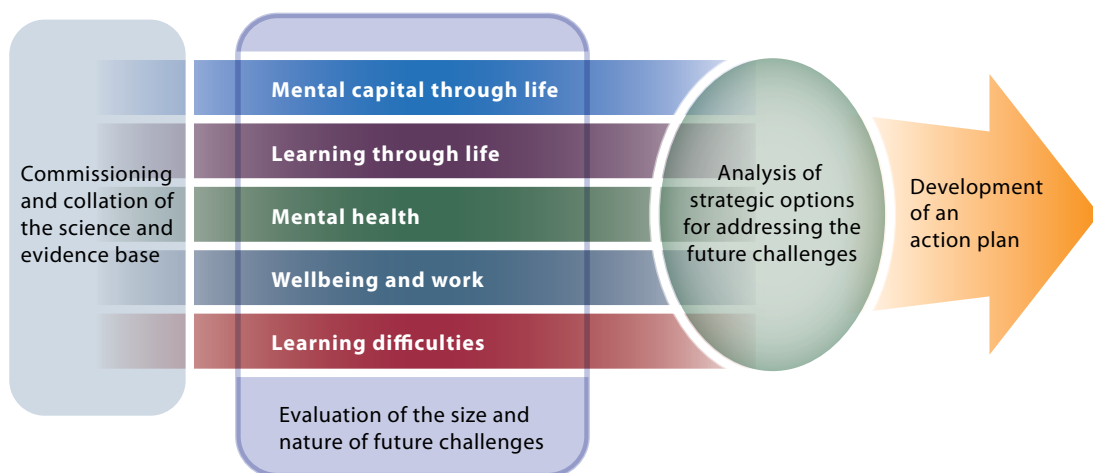


# Appendix A: Overview of the work of the Foresight Project on Mental Capital and Wellbeing

The aim of the Project is to advise the Government on how to achieve the best possible mental development and mental wellbeing for everyone in the UK.

The main components of the Project are set out in Figure A.1 and are described below. Further information may be found on the Project website ([www.foresight.gov.uk](http://www.foresight.gov.uk)). All the Project papers and reports will also be made freely available through this website – either electronically or in hard copy (Note: some of these will only become available at the launch of the final report, in October 2008).

**Figure A.1: The main components of the Project**



## Analysis of future challenges

The starting point was to generate a vision for the size and nature of future challenges associated with mental capital and wellbeing, and to assess how the situation might change over the next 20 years. This analysis was predicated on the assumption that existing policies and expenditure remain unchanged. To make the analysis tractable, the work was divided into five broad areas, as indicated in Figure A.1. The present report documents the findings from one of these – Wellbeing and work. Details of the reports of the five areas are listed in Table A.1 (overleaf).

Table A.1: The challenges ahead – reports of the findings		
Designation	Title	Authors
CR-E	Mental capital through life: Future challenges	T. Kirkwood J. Bond C. May I. McKeith M. Teh
CR-A	Learning through life: Future challenges	L. Feinstein J. Vorhaus R. Sabates
CR-B	Mental health: Future challenges	R. Jenkins H. Meltzer P. B. Jones T. Brugha P. Bebbington M. Farrell D. Crepaz-Keay M. Knapp
CR-C	Wellbeing and work: Future challenges	P. Dewe M. Kompier
CR-D	Learning difficulties: Future challenges	U. Goswami

The five areas were chosen to map closely onto the interests of important Government Departments, although it was recognised from the outset that the areas were interrelated. Therefore, consideration across the five has also been undertaken – the results of that will be reported in the final Project report.

### Supporting evidence and analysis

The above analysis was informed by:

- Consideration of the underpinning science associated with each of the five areas. This was informed by approximately 80 commissioned reviews – these set out the current state-of-the-art of science in diverse fields, and also scientific developments of particular interest (Appendix C details the various Project reports and papers).
- Reviews of certain socio-economic factors. These were performed when the existing literature was deemed insufficient for the purposes of the Project. In particular, these reviews addressed the relationship of the physical environment to wellbeing, and the evolving use of information and communication technology (see Appendix C).
- Economic analysis. This has taken a broad view of the direct and indirect impacts of important issues – such as specific learning difficulties and mental health problems.
- Systems analysis relating to each of the five areas. An account of the Project systems work is available in a separate report (see Appendix C; SI: Systems maps).

- The development of hypothetical future scenarios. These have been used to explore future uncertainty in the five areas (listed in Figure A.1), and to test the robustness of possible interventions. An account of the scenarios and their use within the Project also appears in a separate report (available through [www.foresight.gov.uk](http://www.foresight.gov.uk)).

The present work also drew upon: a survey of the opinions of leading experts (see Appendix D); existing literature; as well as numerous workshops and meetings with leading stakeholder organisations.

### **Analysis of strategic options and possible interventions**

Having identified important challenges for the future, the Project identified and analysed possible interventions and strategic options for addressing them. Here the analysis has taken a lifecourse approach, recognising that: some choices and interventions may interact with each other; some may affect several challenges at different stages in the lifecourse; and some may have lasting impacts. Consideration was also given to practicalities affecting the realisation of the interventions: for example, cost-benefit analysis; issues of ethics; governance; and public attitudes. The results from this phase of the Project are presented in the final Project report.

### **Stakeholder engagement**

From the outset, the Project has involved a wide range of leading stakeholders from both the public and private sectors. The intention has been to work closely with these bodies to develop a comprehensive plan to take forward the findings of the Project. That plan will be announced around the time of the launch of the final Project report in October 2008.



# Appendix B: Wellbeing and work – a visual representation

This report has shown that there are many factors that affect wellbeing at work. It was therefore considered useful to develop a single visual representation which encapsulated the principal elements and their broad interaction. Such a representation has therefore been developed and used in the present work.

This Appendix briefly presents the visual representation (also termed a “conceptual overview”) that was developed. It is beyond the scope of this report to provide a full explanation here; however, a detailed description will be made available in a separate Project report (see Appendix C). That systems report will also provide equivalent diagrams for four other important aspects of mental capital and wellbeing (introduced in Appendix A), as well as other types of systems diagrams which have been used within the Project (in particular, these include a causal model which links the various factors affecting stress in the workplace).

Figure B.1 provides a schematic of the principal parts of the conceptual overview which appears in full in Figure B.2. However, it should be stressed that Figure B.2 does not purport to cover every possible aspect of wellbeing and work – that would have rendered an already detailed representation overly complex, and masked the underlying structure. Likewise, it is expected that others might contest some of the details of the diagram. However, Figure B.2 was considered to be sufficiently detailed and sufficiently accurate to be of use for the purposes of the present Project – and indeed, a useful basis for further development by others.

Referring to Figure B.1, the principal parts are outlined as follows:

- The core of the diagram is the employee who appears within a circle representing the employee who is equipped with varying skills and resources.
- The top of the diagram represents the economic environment, which has elements at the global scale and more local scales, but which results in conflicting pressures for managers, as they are squeezed between competitive demands and the need to ensure wellbeing at work for their staff.
- The sector to the left of the employee represents the various aspects of the work environment which affect wellbeing. These include the various stressors, as well as interventions that affect work and wellbeing.
- The scales at the bottom represent the work-life balance which the individual needs to strike – between the various stressors of the work environment and his/her own wellbeing, both within work and outside work.
- The sectors (green and red) to the right of the employee represent the positive and negative wellbeing outcomes that can result.

Figure B.1: Schematic of the principal parts of the conceptual overview

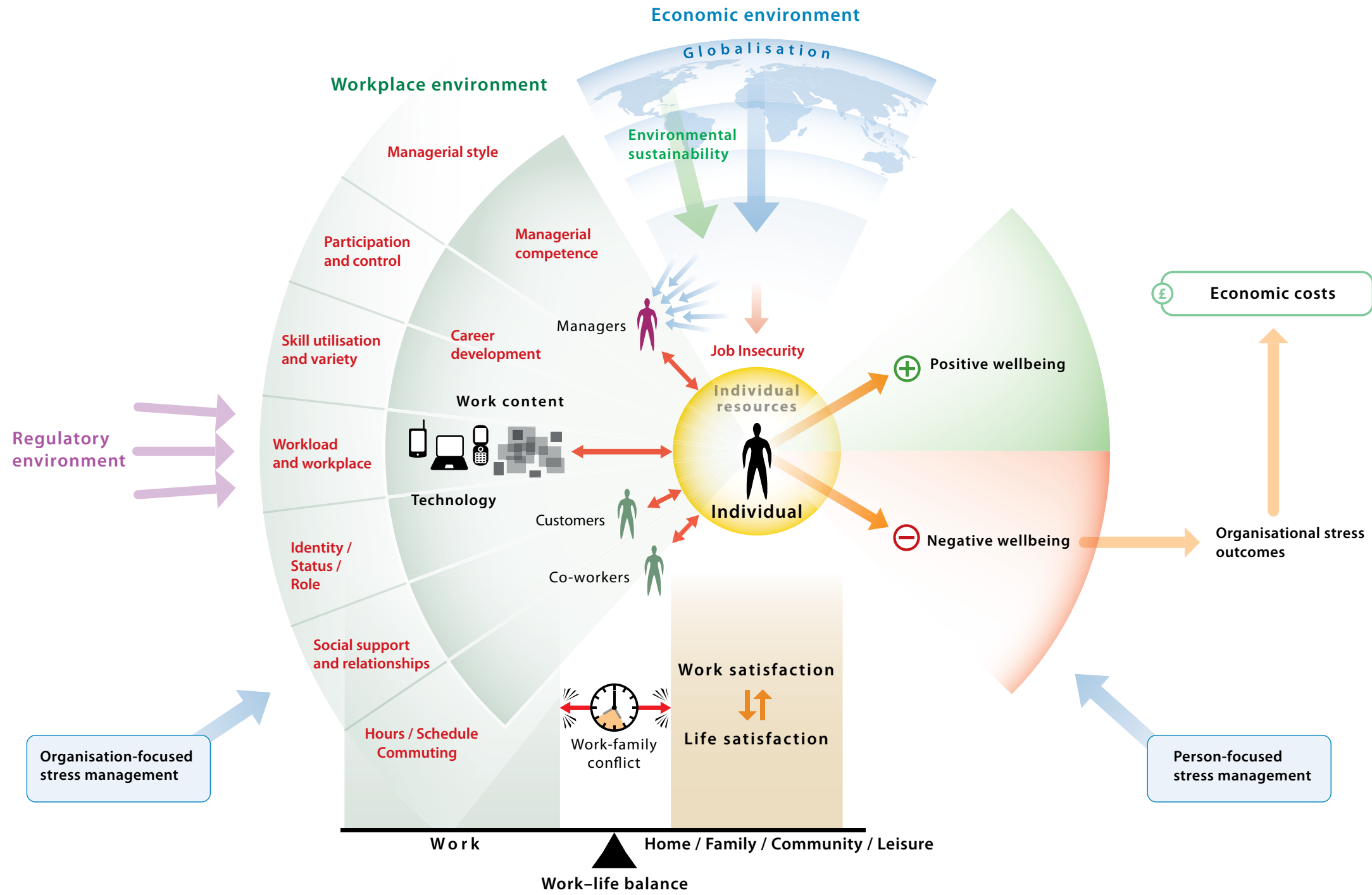
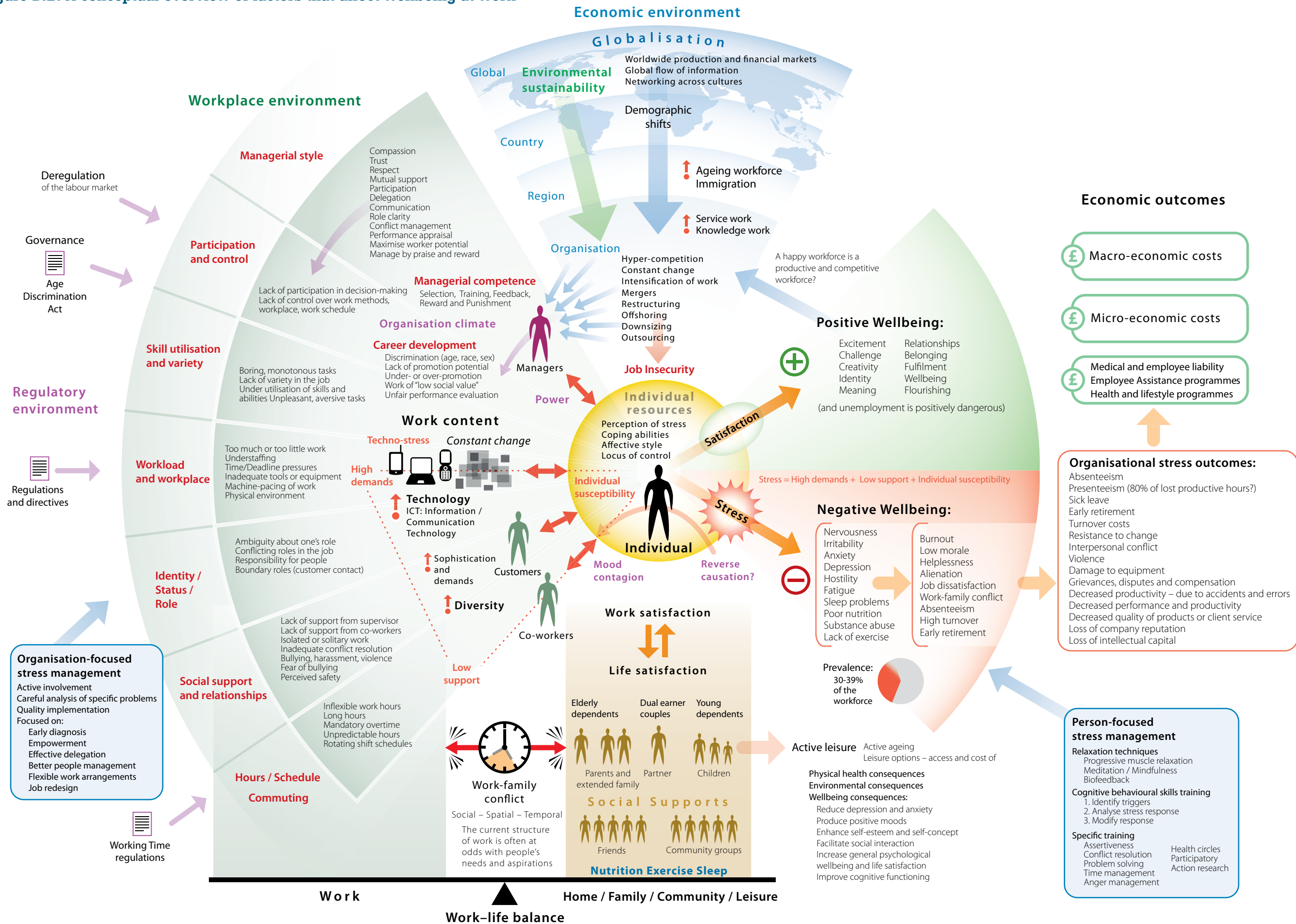
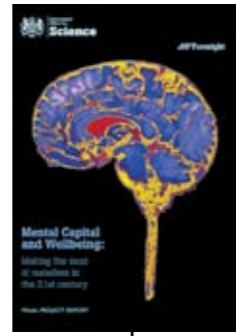
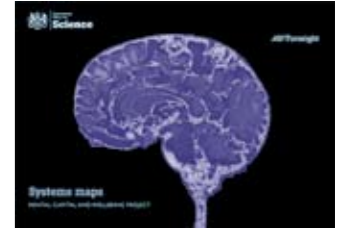
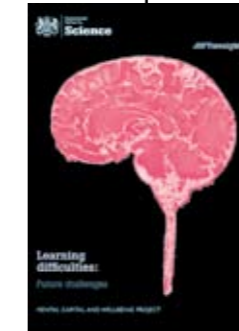
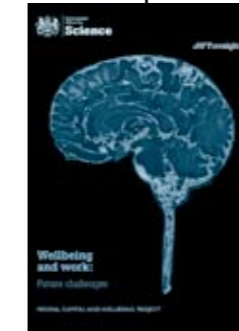
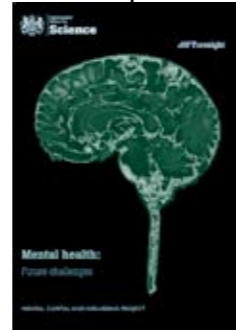
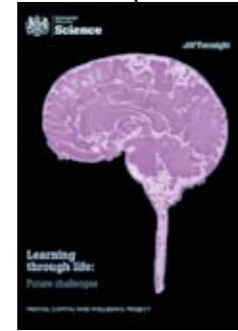
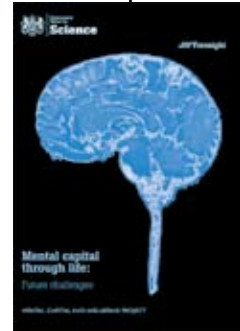


Figure B.2: A conceptual overview of factors that affect wellbeing at work





# Appendix C: Structure of the Project reports and supporting papers



**Mental capital through life:  
Future challenges**

- SR-E1:** Neuroscience of education
- SR-E2:** Human reward
- SR-E3:** Neuroeconomics
- SR-E4:** Cognitive reserve
- SR-E5:** The adolescent brain
- SR-E6:** Behavioural economics
- SR-E7:** Resilience
- SR-E8:** Adolescent drug users
- SR-E9:** Pharmacological cognitive enhancement
- SR-E10:** Stem cells in neural regeneration and neurogenesis
- SR-E11:** Early detection of mild cognitive impairment and Alzheimer's disease: An example using the CANTAB PAL
- SR-E12:** Anxiety disorders
- SR-E13:** Neurocognition and social cognition in adult drug users
- SR-E14:** Normal cognitive ageing
- SR-E15:** Social cognition in teenagers – inclusion
- SR-E16:** HPA axis, stress, and sleep and mood disturbance

- SR-E17:** Nutrition, cognitive wellbeing and socioeconomic status
- SR-E18:** Nutrition and cognitive health
- SR-E20:** Effect of chronic stress on cognitive function through life
- SR-E21:** Depression and its toll on mental capital
- SR-E22:** Fitness and cognitive training
- SR-E24:** Effects of exercise on cognitive function and mental capital
- SR-E25:** Technology solutions to prevent waste of mental capital
- SR-E27:** Housing as a determinant of mental capital
- SR-E29:** Cognitive neural prosthetics
- SR-E31:** Cellular and molecular logic of neural circuit assembly

**Learning through life:  
Future challenges**

- SR-A2:** Learning at work
- SR-A3:** Skills
- SR-A4:** Participation in learning
- SR-A5:** Evidence-informed principles from the Teaching and Learning Research Programme
- SR-A7:** Estimating the effects of learning
- SR-A9:** Self-regulation and executive function
- SR-A10:** Lifelong learning across the world
- SR-A11:** Non-cognitive skills
- SR-A12:** Future technology for learning

**Mental health:  
Future challenges**

- SR-B1:** Genetics and social factors
- SR-B2:** Mental health of older people
- SR-B3:** Positive mental health
- SR-B4:** Mental disorders in the young
- SR-B5:** Prisoners
- SR-B6:** The homeless
- SR-B7:** Children in local authority care
- SR-B8:** The costs of mental disorders
- SR-B9:** Serious and enduring mental illness
- SR-B10:** Personality disorders
- SR-B11:** Violence
- SR-B12:** Ageing
- SR-B13:** Migrants
- SR-B14:** Substance abuse
- SR-B15:** Depression

**Wellbeing and work:  
Future challenges**

- SR-C1:** Workplace stress
- SR-C2:** Mental wellbeing at work and productivity
- SR-C3:** Management style and mental wellbeing at work
- SR-C4:** Flexible working arrangements and wellbeing
- SR-C5:** New technology and wellbeing at work
- SR-C6:** Stress management and wellbeing
- SR-C7:** Working longer
- SR-C8:** Leisure: the next 25 years
- SR-C9:** Training in the workplace
- SR-C10:** Careers
- SR-C11:** Violence at work

**Learning difficulties:  
Future challenges**

- SR-D1:** Specific language impairment
- SR-D2:** Dyslexia
- SR-D3:** Adult learning disabilities
- SR-D4:** Dyscalculia
- SR-D5:** Deafness
- SR-D7:** Genetics and diagnosis of learning difficulty
- SR-D8:** Conduct disorder and anti-social behaviour
- SR-D9:** Social cognition and school exclusion
- SR-D10:** Autism and autism spectrum disorders
- SR-D11:** Attention Deficit Hyperactivity Disorder
- SR-D12:** New technologies and interventions
- SR-D13:** Trajectories of development and learning difficulties
- SR-D14:** Early neural markers of learning difficulty
- SR-D15:** Childhood depression
- SR-D16:** Eating disorders

**Cross-Project papers**

- SR-X2:** Science of wellbeing
- SR-X3:** Neurobiology of wellbeing
- SR-X5:** Neural circuit assembly
- DR-1:** ICT as a driver of change
- DR-2:** Physical environment and wellbeing
- ER-1:** Ethics

**S1: Systems maps**

Note 1: Some reference numbers were assigned to topics; however, the reports/papers were not subsequently commissioned.

Note 2: The Project commissioned some additional "discussion papers" as referred to in the text of the final report.

These will be made available through [www.foresight.gov.uk](http://www.foresight.gov.uk) in due course.

# Appendix D: Into the future – a survey

Developments in the future are subject to many diverse factors and influences which interact in complex ways, and which can create a range of possible outcomes. Consequently, it is impossible to predict likely outcomes, except for the simplest cases, and for short timescales.

However, futures techniques offer many different approaches to analysing future uncertainty<sup>226</sup> and the use of future scenarios has been used in this Project to “sample the future possibility space”. However, there is also a place for informed expert judgement about what may happen or what is likely to happen. And as long as such opinions are treated as such, they can also provide useful insights. A survey of expert opinion has therefore been used to inform the thinking and analysis reported here. This Appendix outlines the nature of the survey, and the key results obtained.

## How the survey was conducted

Forty experts in the field of work stress, and health and safety were identified across the United Kingdom. Each was sent a short questionnaire and asked to respond to four questions: to identify what they believed would be the most significant factors influencing the nature and structure of work over the next 10 years; the ways in which these factors would influence work; what they believed would be the most significant differences between work as we currently experience it and work in ten years time; and the impact such differences would have on wellbeing. The relatively short timescale (ten years) was chosen to limit the uncertainty in the views which inevitably increases with the time horizon.

Responses to each question were analysed and the major themes that emerged are presented below. The results are based on a response rate of 35%.

### Question 1

What do you believe to be the most significant factors that will influence the nature and structure of work over the next 10 years?

- **Technology:** E-based and mobile commerce; virtual technologies; decrease in face-to-face working.
- **Globalisation:** Emerging markets for the East; industrial-corporate terrorism.
- **Climate change:** Restructuring work to reduce carbon emissions; greater emphasis on reducing energy costs and energy conservation.
- **Changing demographics:** More diversity and multicultural working; ageing population; more employee mobility particularly across the EU; changes in family structures; increase in obesity, diabetes and other chronic diseases.

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226 A toolkit for futures techniques may be found on [http://www.foresight.gov.uk/HORIZON\\_SCANNING\\_CENTRE/Good\\_Practice/Toolkit/Toolkit.html](http://www.foresight.gov.uk/HORIZON_SCANNING_CENTRE/Good_Practice/Toolkit/Toolkit.html)

- **Management changes:**

*Individual development issues* – Emphasis on selecting suitable candidates and talent management; greater focus on training for interpersonal and management skills.

*Management processes* – Greater reliance on contracted services and flexible working; more inclusive practices; the need for a better understanding of health and wellbeing at work; greater emphasis on organisational justice; greater divide between “good and bad jobs”; closer development between higher education and industry in terms of new discipline-management training and relevance and focus of training.

## Question 2

In what way do you think these factors will influence the nature and structure of work?

- **Increased competition will continue to intensify work:** Working smarter to maintain a competitive edge; development of advanced systems for management processes and delivery systems; more production and manufacturing based offshore particularly in the Far East; more efficiency gains through downsizing, reorganising, and merging of organisations; continued work intensification; shorter deadlines, more pressure to perform and be efficient; competition through work pace and work intensification will continue to contribute to ill health at work; competition and staff shortages will continue to make employee wellbeing a problem.
- **Greater emphasis given to environmental issues and opportunities:** Green technologies will give rise to new highly specialised skills; skills needed to rebuild areas affected by natural disasters; work structures change to aid carbon emissions through electronic conferencing and remote office working; the changing nature of agriculture will see this sector emerge as providing significant employment opportunities; technology will influence working arrangements and transport patterns.
- **Greater need for interpersonal training and skills and health promotion:** Greater integration of health and wellbeing training, so it becomes an accepted part of business practice; greater need by organisations to give health a priority; greater need for health promotion; greater emphasis on interpersonal and management skills training; need to be more aware of opportunities for social inequalities to develop.
- **Greater focus on diversity particularly in terms of flexibility, mobility, skills and work values:** The mobility of workers, particularly migrant workers, will require a review of conditions of employment and employment rights, heightened trade union activity, and variability and flexibility of work patterns; staff shortages and skills will become an issue with changing demographics, particularly as a result of an ageing workforce; increasing difficulty in retaining skilled and high performing employees, with flexible working conditions necessary to attract and retain skilled workers and meet business needs; younger workers with different work expectations wanting greater balance between home and work.
- **Work patterns will continue to change through technological innovation:** Greater emphasis on long-distance working (i.e. less face-to-face working), more homeworking; greater impact and use of “real-time” information outside of the office; more remote and home-based work; the availability of information and information technology will continue to intensify work.

### Question 3

If you were to identify the one most significant difference between work as we currently experience it and work in ten years' time, what would that difference be?

- Reduction in face-to-face working; greater use of virtual, less office-bound work.
- Self-determination: Flexibility and variety in tasks and roles; the buzzword of the future will be interface; vertical and horizontal development and application of knowledge and skills.
- Intensification of work.
- Variation in work patterns: less security of work contracts, flexible working and more job (career) change; more use of contractors and flexible working for permanent employees.
- More people in the workforce with health problems.
- The ageing workforce; greater numbers of older workers.
- Change in workforce profiles because of widespread migration.
- A divergence in the workforce, with half working for large corporations with significant changes in work patterns, and the other half creating their own opportunities through enterprise/personalised service, enjoying extra flexibility to develop new ideas-products.

### Question 4

What sort of impact do you think that difference (identified in Question 3) will have on wellbeing and why?

- **Technology and its possible impact:** Significant impact on wellbeing since there will be less social interaction; impact on wellbeing from the inappropriate use of new mobile communication technology.
- **Flexible work and its downside:** The advantages of flexible work patterns are likely to be outweighed by increased insecurity, which for many will be a source of stress and mental strain; covering for colleagues with unplanned absences will put pressure on others, risking potential stress-related problems; flexible working will continue to result in more of the same – musculo-skeletal conditions, drug and alcohol problems and health issues resulting from physical inactivity; more mental and physical illness as a result of absenteeism, presenteeism and lack of motivation as a result, perhaps, of the need for highly specialized and skilled workers and growing staff shortages; social inequalities will result in greater mental health issues.
- **Work complexity and the need for a changing style of management:** More complex, specialist institutions emphasising differentiation and diversity will require greater trust between employer and employee if more working from home becomes the norm; the desire for greater performance will see a greater need for better relationship management.

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