12 Emerging trends and future directions in Occupational Psychology

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Learning outcomes

On completion of this chapter you should:

- appreciate what Britain might 'look like' in the future;
- have an understanding of some of the emerging trends in the workplace;
- appreciate how these changes may influence the future of Occupational Psychology.

Introduction

There is little doubt that the work environment is changing and that work life has undergone a dramatic transformation during the 20th century. With this in mind, it is probable that the future of work will also look remarkably different; but making 'predictions' regarding future directions in Occupational Psychology will most likely be inaccurate. Think, for example, that in the 1970s it was suggested that human intelligence would soon be replaced by computer technologies and that all offices would be paperless (Sellen and Harper, 2003); yet neither prediction came true. What we can say with certainty is that work in the future will look radically different to what we know today, or could even imagine. So even if it is difficult to predict what will actually happen, in anticipating the future, Occupational Psychologists may be able to plan for the changing expectations of employees, organisations and the implications that this may have for the future

workplace. Thus, in this chapter we aim to introduce you to some general directions of Occupational Psychology, given the emerging and (possible) future trends in the workplace.

What might the UK look like in 2020?

A good place to start thinking about 'the future of Occupational Psychology' is to consider what the UK might look like in 2020 (with the caveat that it is virtually impossible to make accurate forecasts). We outline here some of the projected statistics relating to the UK and then consider how these might influence the workplace.

In 2011, the Office for National Statistics (ONS) projected that the UK population will increase by 4.9 million between the years 2010 to 2020, with the UK population reaching 70 million by mid-2027. The ONS also indicates that the population is steadily aging (ONS, 2011). Currently, life expectancy at birth in the UK has reached its highest levels for both males (78.5 years) and females (82.6 years); and it is anticipated to increase (ONS, 2011). In fact, life expectancy is anticipated to increase by nearly five years between 2010 and 2035, when it is projected to reach 83.4 years for males and 87.0 years for females.

In 2010, those over 60 years old in the UK accounted for 22.6% of the population, and by 2020 this is projected to rise to 23.9%. The total number of people of state pension age (SPA) is likely to increase by 28% from 12.2 million today to 15.6 million in 2035. Between the years 2010 and 2020, SPA will change from 65 years for men and 60 years for women to 65 years for both sexes. Between now and 2046, SPA is projected to rise to 68 also for both sexes. So for those of you entering the workplace today, you can expect to be working well into your 60s, and possibly into your 70s.

The ONS also suggests that there will continue to be significant net migration into the UK over the coming years. Migrants are said to be people who change their country of usual residence for at least one year, so that the UK becomes their country of residence instead. The current estimate (ONS, 2011) is that over 200,000 people will migrate to the UK each year, with the majority of these expected to be aged between 20 and 39 years.

Thinking about all these changes that will take place in the UK generally, what might an organisation of 2020 look like? It is likely to be characterised by an aging workforce, but also have an influx of younger employees (who may be termed Generation Y [Donkin, 2009]) and, given the steady flow of migration, we are likely to see increasingly multicultural organisations. Indeed, Donkin (2009) suggests that changing demographics will be an important force for change in the future – in the next 10 years we are likely to see the proportion of the population over 65 to exceed those aged less than 16. People will increasingly be working in organisations for longer to reach state pensionable age; once

they leave work, since life expectancies are increasing, they are likely to spend an increasing proportion of their lives *not working* as well. Not only will population growth and the aging population be significant in the workplaces of the future, but also the impact of migration and the likely growth of new and different industries.

> If you cannot accurately predict the future then you must flexibly be prepared to deal with various possible futures. (Edward de Bono)

Recession and current financial/political situation

We have been, and still are in early 2013, experiencing a global recession that started in 2008. Generally, in the UK, this has led to higher unemployment particularly among the young; less consumer spending; a decline in house prices (although London remains less affected); an increase in bankruptcies; and increasing food and petrol prices. While 'every day' people have been hard hit by the recession, remarkably many large corporations and even banks (some of whom had been bailed out by the UK government) were reporting record profits and paying huge bonuses to their CEOs and senior executives in 2009.

Nevertheless, throughout the world, there has been evidence of political instability arising from the global recession. Indeed, the 'Arab Spring' is said to have been sparked by general discontent caused by high inflation, unemployment and corruption (Spencer, 2011). Many countries have been implementing significant 'austerity measures' – felt here in the UK and throughout Europe. This has led to political unrest, for example, there was a huge general strike in Greece because of the economic situation and schools, airports and other services were closed. Later there were riots on the streets of Athens. Currently there is uncertainty over whether Greece (and perhaps Portugal and Spain) will remain within the Eurozone. It may be that the time that this book goes to press, the Greeks have exited the euro and are back using drachmas. If this happens, perhaps we will see pesos in Spain and escudos in Portugal.

There is no doubt that the political landscape is changing and with it the world in which organisations operate. It remains to be seen the extent to which this will impact the employees working within them. In these challenging times, it certainly seems harder for young people to get jobs and many more people are being made redundant. This is likely to influence culture and climate, and with significant numbers of people out of work, we may face a situation in the UK where people have been out of jobs for longer than in them. How will these issues effect organisations of the future? These issues may significantly influence many of the emerging trends and future directions of Occupational Psychology.

Emerging and future directions of work and Occupational Psychology

Here, we summarise some of the emerging and future changes anticipated in the workplace as suggested by the authors in Part II. In so doing we will draw on many of the authors' insights as to how these might influence the future of Occupational Psychology. First, you might wish to use the technique outlined in Box 12.1 to imagine for yourself what the emerging and future directions of work and Occupational Psychology might be.

Box 12.1

Stretch Imaging (Patterson and Zibarras, 2009)

The following technique encourages you to consider how the world might look like in the future. Using this technique might help you decide for yourself what some of the future directions in Occupational Psychology might be.

There are three stages to this process, outlined below.

Stage 1

First imagine that the year is 2020 and then focus on what the world might look like by then – it might help you to consider some of the demographic changes that we have outlined in the previous section. Consider some of the following questions in order to create your image:

- What types of social policies exist in the UK?
- What does a 'working week' look like?
- Which industries are most successful?
- Which country is the most economically powerful in the world?
- What does the 'average' family look like now?
- Is the importance placed on 'work' in a person's life changed? If so, in what ways?
- Have communications and personal interactions at work changed? If so, in what ways?
- Have the education and health systems changed? If so, in what ways?

You should be able to provide a rationale based on your current knowledge as to why certain things have changed in the way you suggest.

Stage 2

Now that you have developed a vision of the world in 2020, apply this to Occupational Psychology. You may want to consider the following questions:

- In 2020, what have been the key changes to the economic and social environment?
- In 2020, what have been the key changes to the workplace?

- How has this influenced the eight areas of Occupational Psychology?
- Are there still eight areas of Occupational Psychology?
- Have there been any political changes that have influenced this as well?
- What impact might this have had on your role as an Occupational Psychologist?

Stage 3

In the final stage, consider what Occupational Psychology might do in order to meet these particular challenges in the future. The idea here is to generate novel ideas that might be useful in a rapidly changing environment.

Impact of technology

Overwhelmingly, the chapters in Part II highlighted technology as the key area that is likely to impact our future working environments. In fact, many of those influences are already being seen with many changes in technology emerging currently. As we emphasised in Chapter 1, there have been huge technological advancements in the previous hundred years or so. This has resulted in rapid changes in organisations, such as alterations in job requirements and the ways in which people work. So the impact that technology has been having on people's working lives and Occupational Psychology is already evident, and there is very little doubt among the authors of the chapters in this book that technology will continue to have a significant influence. A number of key areas have been identified in each of the chapters and here we outline some of the main themes.

As was highlighted by the author of Chapter 11 on automation and human–machine interaction (HMI), we might say that we are currently in an era of 'techno-dependency' where many of us, all over the world, rely on various technologies to do things both at work and in the home. The examples given in Chapter 11 included buying groceries and checking bank balances on our mobile phones and using voice automated systems to help those who are less able to take care of themselves. All of these technological changes – of which there are sure to be many more over the coming decades – will require the expertise of Occupational Psychologists expert in the field of HMI to ensure that these technologies are easy to use; and support rather than hinder employees in the workplace.

Dr Chandra Harrison, Freelance Researcher

' As technology becomes more and more pervasive in our lives and in our work, the need for better human-centered design becomes more apparent. '

The impact of technology was highlighted in Chapter 9, 'Selection and assessment'. Here, the authors suggested an increase in the use of online testing, which has both benefits and drawbacks for applicants and organisations. For applicants, they can have access to testing at a time and place that suits them, but access relies on having a good Internet connection. From an organisation's perspective, there is greater access to applicants from around the world but online testing may increase the potential for cheating. The authors also suggested the increase in the use of different types of media in selection, such as video-based CVs and multi-media SJTs. The use of these technologies may have the positive effect of improving the fidelity (or reality) of selection methods, but Occupational Psychologists must ensure that appropriate research accompanies practice to confirm that these methods are appropriate (with good predictive validities and that they are acceptable to candidates).

For those of you who have applied for jobs in organisations, you will see that technology is often a key part of the process – many organisations use their website to give information to potential applicants and ask that CVs or application forms are completed online or submitted via email. However, organisations of the future will need to be aware that poor website design can have a negative influence on recruitment outcomes; stylistic features have been shown to influence an applicant's attraction to the organisation and their decision to accept the job (Cober et al., 2003), and website usability is positively related to organisational attractiveness (Pfieffelmann et al., 2010). It is in this area where HMI and selection and assessment will no doubt meet; thus HMI may be particularly important in addressing how people interact with and use organisational websites.

Another interesting area where selection and assessment might be different in the future is the extent to which we might use other ways to select employees. Consider, for example, the potential use of genetic testing. Might this be a way in which organisations choose to select people? However, this is likely to open up a huge area of potential for discriminatory practices if people are selected based on genetic tests. Currently the Ministry of Defence uses biochemical screening for sickle cell disease. It is argued (Ernsting et al., 1999) that this prevents potentially catastrophic sickling that can be brought on by low oxygen pressures in flight. It may be possible here to justify selecting out people with this disease, but at what point would this be a form of eugenics?

It is also likely that our interaction with social networking sites will continue to grow in importance in relation to selection and assessment. In January 2012, Facebook Timeline was launched, which is a feature that enables a user to scroll through an individual's history – for instance seeing what an individual did in a particular year. An article by Philip Landau (2012) in the *Guardian* suggests that this will have important effects from an organisational point of view. Already it is suggested (careerbuilder.co.uk) that over one-half of employers use social networking sites to research employees and applicants; and it is likely that this will only increase with a higher percentage of individuals using the sites, and with sites having more accessible and organised information. Although there are implications

for employers using this information with regard to the Data Protection Act, Landau suggests that 'it is unlikely that an employer viewing a personal social media site without printing it off or forwarding it would be caught by the Act'. The increased use of this form of 'pre-application vetting' by employers opens opportunities for Occupational Psychologists to advise on how best organisations might use these resources effectively and ethically. We would also predict that the vetting will become more sophisticated. With a recent article by Back et al. (2010) finding that Facebook profiles represent actual personality (rather than an idealised self-perception, which may be a criticism of use of personality psychometrics in selection), we can start to see how these social networking sites may continue to grow in importance for organisations.

Professor Kurt Kraiger, Professor of Industrial Organisational Psychology, Colorado State University, USA

'Clearly, topics such as virtual work, telecommuting, social networks, and so forth will be increasingly important in the future for Occupational Psychology. Although organizations may *implement* these types of interfaces, as Occupational Psychologists we must question whether what they have implemented is based on research of what works and why.'

In Chapter 10, the authors outlined a number of ways in which technology is already being used to deliver different training programmes, for instance, through the use of the Internet, virtual learning and mobile technologies. As the authors highlighted, the annual CIPD survey of training and development shows that there has been a significant increase in the usage of technology-based methods, with the advantages of such methods being flexible for trainees since people can complete training programmes at any time from any place in the world. However, currently, e-learning is still considered less effective than other training methods and so future workplaces may use 'blended' learning solutions, which mix technological and non-technological approaches to build on the advantages of both approaches. Again, it is possible to see how the concepts drawn from human–computer interaction (Chapter 11) will be important in this domain.

Alastair Wallace, Managing Director of Brainfood, also has some very interesting points to make about the impact of technology on training as follows:

The huge increase in the number of smartphones and tablet computers has led to new and exciting ways to incorporate their use in a training environment to run events such as 3D virtual simulations for trainee surgeons, and electronic performance support systems (EPSS) to provide real time support for complex and highly dangerous roles, such as offshore crane operators.

Social networking is going to have a much more profound influence on the way we train and develop in the future. Practitioners are already using social networking to set up communities of practice to share ideas and techniques, and also to build cohorts of participants across multi-disciplinary long term leadership programmes where delegates are geographically dispersed.

Sarah Lewis, Managing Director at Appreciating Change

'I think the impact of social media, cloud technology, interconnectedness, instant access has great implications for our notions of how organisations will be designed, organised and managed. Leaders who work with the concept that they can control the information in their organisation, and, even more pertinently, the sense people make of what is going on, will find their ideas increasingly at odds with what is actually happening. Organisations have yet to work out how best to work with and benefit from this changed world of information and connection.'

In Chapter 5, technological developments are considered in the field of counselling, specifically concerning e-based counselling. There has been an emergence of counselling through email whereby the client and counsellor email each other through a secure web portal. Other technologies that may increasingly be used in the future are those of live chat, Skype and MMS. Indeed the use of virtual environments may facilitate counselling encounters where the client and therapist meet in a virtual room. The use of technology was also explored in Chapter 7, 'Design of work environments'. Here, the author shows how the use of technology needs to be considered when thinking about workplace design. Indeed, as technology becomes increasingly complex in future organisations, the design of technology-based tools used at work must consider the abilities and limitations of a person's skills (perceptual, cognitive and motor). If there are significant mismatches, the potential for human error and subsequent accidents will rise.

The increase in technological capability within our environment and within organisations specifically means that increasingly employees are able to work remotely. Teleworking (also called telecommuting or virtual working) is defined by Baruch as 'An alternative work arrangement by which employees perform tasks elsewhere that are normally done in the primary or central workplace, for at least some proportion of their work schedule, using electronic media to interact with others inside and outside the organisation' (2001: 114). The increase in 'working from anywhere at anytime' (Kurland and Bailey, 1999) has been immense. In 1994, Wilkes et al. stated that forecasts suggested teleworking would involve 90 million people worldwide by 2030. In 2007, Sudan et al. stated that the teleworker

population in 2006 was actually 758.6 million – and forecast that this would rise to over 1 billion by 2011. To put this into context, this would represent nearly one-third of the worldwide employee population engaging in telework.

The rise in the mobile worker population has significant implications for Occupational Psychology in terms of both theory and practice. Many researchers have noted that working away from the central organisation has an impact on the employee's motivation for work, their attitudes, their organisational perceptions, and their perception and belief about work relationships (Morganson et al., 2010). These differences for both the individual and the organisation can be both positive (for instance, the increase in autonomy and reduction in overheads) and negative (for instance, social isolation, reduced organisational commitment and lack of support). A meta-analysis by Gajendran and Harrison (2007) recently aimed to develop a model of teleworking, however, researchers argue that evidence is still contradictory and interdeterminate – meaning that the jury is still out on when and in what context teleworking may be beneficial or adverse for employees, the organisation and the wider society. Occupational Psychology has a real part to play academically by conducting more research to explore the impact of teleworking, and in practice to develop guidance and interventions for organisations in order to create effective teleworking policies and practices.

Professor Frank Bond, Professor of Occupational Psychology and Head of Department, Goldsmiths, University of London

'The trend in teleworking and flexible working will continue to grow. This has already presented opportunities for Occupational Psychologists in terms of how leaders lead, team working and work design. Certain sectors, such as the financial services, have not adopted these new ways of working to the extent that others have (e.g. marketing and PR); we expect this will change.'

Impact of ageing workforce

As outlined earlier in the chapter, the age demographics of the UK will look significantly different over the coming years. Additionally, within Europe it has been estimated that by the year 2050, the proportion of workers aged between 55 to 64 will increase to 60% (Carone et al., 2005). This represents a significant shift in the age composition of the future workforce and it will be important for Occupational Psychology to understand the role of age in the workplace. Occupational Psychology has only just begun to touch on the issue of age in the workplace and advances will certainly be needed both in terms of theory and practice.

Nevertheless, some recent research has begun to investigate how age may influence certain work outcomes (Kanfer and Ackerman, 2004; Ng and Feldman, 2010). For example, in Ng and Feldman's (2010) meta-analysis of over 800 empirical articles, the authors found a positive relationship between age and many job-related attitudes. For example, older workers had higher job satisfaction, they were more satisfied with the work itself and were more satisfied with their levels of pay. Additionally, older workers were more motivated at work and made more positive assessments of their work environment. Findings also showed that older workers were more committed at work. These types of findings may influence how certain Occupational Psychology interventions are designed to account for age.

In future, organisations will need to address some crucial questions regarding the extent to which there might be stereotypes about age or biases against certain age groups, what human resource policies might be needed to motivate and manage different ages of employees, whether different age groups have different work–life balance tensions and how jobs can be designed to take into account the needs of different ages of workers. These are among the types of issues that are likely to be addressed by Occupational Psychology in the future.

There are some interesting points in Chapter 5 regarding the 'theories of career development' which touch on the concept of age in the workplace. Many of the theories put forward consider career development as something that evolves throughout different stages of a person's life. So the life or career stage that Occupational Psychologists might explore in future workplaces are the 'late adulthood' stage (Levinson et al., 1978) or the 'maintenance' stage (aged 45–64) as considered by Super (1980).

The potential impact of the ageing workforce on Occupational Psychology is highlighted succinctly in this quote by Professor Frank Bond:

> I think that the ageing workforce will present a number of challenges and opportunities for Occupational Psychologists. Many people will want to work well into their 60s; others will be forced to, owing to increases in the pension age – all over the Western world. In addition, at least in the UK, there is no longer a mandatory retirement age. All of these changes will have an impact on Occupational Psychology; for example, in terms of training and development, ergonomics, counselling and personal development, and performance management. In addition, we do not yet know how our current middle-aged portfolio workers will approach their work, as they get into their 60s.

Globalisation

In a globalised economy and increasingly globalised organisations, managing diversity may be a complex issue for individuals and organisations. Organisations are likely to face challenges of managing a multicultural workforce. We highlighted

in Chapter 1 that many workplaces in the UK are increasingly bringing together different cultures, both physically in offices or virtually via different branches of an organisation being based in different countries around the world. There is a growing challenge for organisations to develop human resource systems (for example, selection, development and training) that take into consideration different cultures and ethnicities. Being part of a multicultural working environment is likely to be increasingly evident as the 21st century progresses.

In some of the chapters in Part II, the authors highlight how globalisation will influence the future of work. For example, in Chapter 5 the authors outlined how employee assistance programmes (EAP) in an organisation may 'look' different depending on the country they are based in. For example, because the concept of the 'counsellor' does not necessarily exist in many countries, it may be social workers in one country, psychiatrists in another and psychotherapists in yet another. Thus the development of EAPs may vary, unlikely to necessarily replicate the UK model. Employee selection (Chapter 9) might also be significantly influenced as organisations become increasingly globalised. A key issue to be addressed will be how organisations can ensure that selection and assessment methods are used fairly for the same job level in different countries. For example, would organisations choose to use exactly the same selection method across countries – say, the UK and the UAE. The challenge here would be to ensure that the selection methods are translated and then used across countries in a best-practice way. But would this be fair, given that the local context in each market would be so different? Would it be more fair to develop entirely different selection methods that take into account different contextual (social, cultural and religious) issues that might significantly impact an applicant's ability to complete a selection method that was originally developed in another country. It is likely that Occupational Psychologists will tackle this issue when working in organisations that operate in different countries.

Other areas to consider in the future of Occupational Psychology

There are also a number of research areas and practice that are currently emerging in Occupational Psychology, which are not necessarily addressed by the BPS syllabus, and may grow in the future. We outline here some key areas employee engagement; resilience; pro-environmental behaviour in the workplace; and methodological advancements such, as multi-level modelling.

Employee engagement

As discussed in Chapter 4, employee engagement is becoming increasingly important in terms of our understanding of employee relations and motivation. It is the

case that despite a proliferation of work in practice, academic literature has not yet caught up. As Saks states 'employee engagement is rarely studied in academic literature and little is known about its antecedents and consequences' (2006: 600).

Future research by Occupational Psychologists must work to understand further both the antecedents, and moderators, of employee engagement in organisations in order to provide the most effective and evidence-based interventions in practice. In particular, Lewis et al. (2011b) suggest that exploring and understanding the leadership or management behaviours that drive employee engagement are crucial.

Resilience

Following the recent financial downturn, organisations are much more likely to be asking questions such as the following:

- What can we do to protect our organisation during this downturn to ensure we can survive?
- How can we perform effectively despite the financial crisis?
- How can we bounce back as an organisation once the situation improves?
- How can we ensure our employees 'weather the storm'?
- How can we keep a healthy workforce in this unhealthy climate?

The answer to all these questions may lie in the understanding of resilience.

Resilience is a very hot topic in practice. If you search online for 'Resilience in organisations' you will see millions of search results with organisations and individuals offering to provide solutions for the problems of developing, improving, measuring and promoting resilience within businesses. In the academic world, the study of resilience in individuals has a rich and compelling history from both the psychology and psychiatry literature. This began with the study of children who were developing well despite poor living conditions, moved on to a focus on resilience in coping with trauma and then expanded to explore the factors that both promote resilience and protect individuals from adversity. A succinct definition of what is meant by individual resilience comes from Windle, describing it as 'the successful adaptation to life tasks in the face of social disadvantage or highly adverse conditions' (1999: 163).

At an organisational level, Lewis et al. (2011a) suggest it is conceptualised in a similar way to individual resilience, but the focus is upon how well the organisation can 'weather the storm' or adapt to challenges it faces. Therefore organisational resilience is concerned not only with the individuals (employees) within the organisation, but also the culture and processes that make up that organisation.

It has been suggested that, perhaps as a result of the literature spanning a number of domains, the understanding of resilience, particularly at the organisational

Table 12.1

Individual resilience	
Resilience is conceptualised as:	Resilience is …
A Personality/individual characteristic	A part of an individual's innate personality (such as internal locus of control, self efficacy and optimism)
Environmental	Dependent on the experiences that individual has had (for instance how much social support there is)
Person-environmental	A product of both personality characteristics and the environment
Organisational Resilience	
Key to resilience is:	Resilience is dependent on …
Job design	The features of an individual's job (for instance how much control they have)
Organisational culture and structure	The culture, processes and procedures of the organisation
Leadership	Engaging, supportive leadership
Systemic/external environment	External environment and social relationships

Source: Adapted from Lewis et al. (2011a).

level, is confused and complex. In 2011, Lewis et al. (2011a) conducted a literature review to understand how both individual and organisational resilience was conceptualised in the literature. A summary of the review is included in Table 12.1.

The range of conceptualisations, and lack of agreement in terms of clear definitions of both individual and organisational resilience, has resulted in an even wider range of approaches in both academia and practice towards addressing the issue of resilience in organisations. Lewis et al. (2011a) also found that there is a real lack of research on organisational resilience. It seems that despite a huge body of literature on resilience in general psychological literature (and from other domains), within Occupational Psychology there has been little interest.

In order to provide clear guidance to practice on tackling resilience, further research within organisations is needed. It is also essential that Occupational Psychologists are able to translate the existing extensive literature on resilience into effective, evidence-based guidance and interventions for organisations. As the literature base is already present, and as the need for resilience in organisations is likely to grow ever stronger over the coming years, both Occupational Psychology and Psychologists are in a unique position to be able to have a significance impact on this area in both academia and practice.

Environmental sustainability

The context within which businesses operate is changing: water scarcity; energy supply problems; a depletion of natural resources; and increased waste may soon have a negative impact on the way organisations function. It is widely accepted that human and industrial activity are largely responsible for creating these types of environmental problems, and thus it has been argued that changes in human behaviour are an essential part of the solution (Oskamp, 2000). Indeed, governments worldwide have increasingly challenged organisations to address their environmental performance in addition to economic performance, with the UK government stressing the importance of employee behaviour change in attaining the UK's environmental targets (Parliamentary Office for Science and Technology, 2010).

In addition to the responsibility that organisations have for addressing environmental issues, more and more companies are beginning to acknowledge the business case for integrating sustainability into their business strategies and are taking a strategic approach to environmental management (Govindarajulu and Daily, 2004). This means we may start to see organisations committing to environmental policies to facilitate a shift towards more sustainable business practices (Jabbour and Santos, 2008). Although behaviour change is recognised as a key part of the solution to the environmental problems that we face, the role of employee behaviour in delivering improvements to an organisation's environmental performance has been largely overlooked (Davis and Challenger, 2009) and it is likely that future organisations may become more savvy in this respect.

Recently, research by Zibarras and Ballinger (2010, 2011) explored the extent to which different environmental initiatives were being implemented in UK organisations to encourage staff to behave pro-environmentally. Of 147 organisations surveyed, most (86%) indicated that they recycled waste materials and 69% of organisations indicated that they had an environmental policy in place within their organisation. Findings also showed that the most prevalent methods used to encourage employee pro-environmental behaviour had significant management involvement, and that these practices were generally perceived to be the most successful approaches to encouraging pro-environmental behaviour, after internal awareness campaigns. The findings highlighted the importance of senior and line management support and commitment, which were rated as the most important facilitators for effective environmental practices within 86% of organisations. Also, lack of senior management commitment was identified as the most significant barrier to effective environmental practices in 70% of organisations. Another key finding from the research was that the environmental practices used in organisations were Occupational Psychology practices which either directly or indirectly fell under the remit of HR departments. These findings suggest that for organisations to achieve environmental targets, both line manager and employee involvement are crucial, and it is here that Occupational Psychologists may have a significant influence in workplaces of the future.

Methodological advances

There have also been significant methodological advances in psychological research over the preceding decades. Techniques, such as structural equation modelling (SEM), are increasingly emerging in Occupational Psychology research and have enabled Occupational Psychologists to predict and explain causal relationships between variables. SEM (as introduced in Chapter 3) allows exploratory and confirmatory modelling and thus is suited to both theory development and testing. In confirmatory modelling, the researcher starts out with a hypothesis that is represented as a causal model and the relationships between the constructs in the model are tested. The model is then checked against the obtained data to see how well the model fits the data. For example, we may theorise that fairness perceptions are influenced by perceptions of job relevance of a specific selection method (say, a psychometric test), but that this relationship is mediated by both a trait (neuroticism) and a state (test-taking self-efficacy). We could use SEM to test this relationship, as shown in Figure 12.1. If we were to use SEM to test this relationship we might, for instance, find that there is significant mediation via self-efficacy, but less mediation via neuroticism.
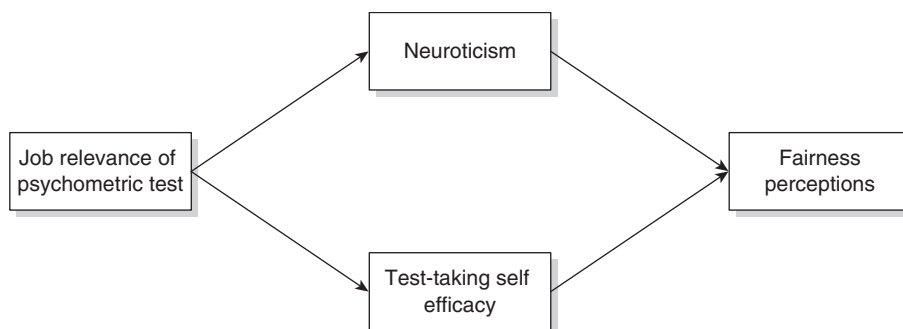
Figure 12.1   Model of relationship between job relevance perceptions of test and fairness perceptions

Other methods such as multi-level modelling (MLM) are also being increasingly used and are useful in Occupational Psychology because they allow researchers to explore the influence of variables at different levels (that is, individual, group, team and organisational level variables) on specific outcomes. This is a particularly effective method to use in organisational research because it enables researchers to identify where an intervention has been successful and at what level. This change follows current trends in occupational research for more contextual understanding of sample and environment. To illustrate this, leadership was originally studied in

terms of what *the leader did or said* (where the employees were not considered). It then moved to a study of *the conditions under which what the leader did or said would be effective* (taking a more situational approach). Later, studies explored the impact of the relationship between the employee and the leader (such as LMX) and *the consequence of what they said or did upon that employee* (such as transformational leadership). Now we are seeing an emergence of literature that explores the effect of the wider team, and both the organisational and external environment, upon leadership and its outcomes (such as complex leadership theory and team LMX). In research we are increasingly seeking to understand more about the mechanisms by which (or conditions under which) variables interact in the workplace – and with this trend, analytical methods will need to become more complex.

Additionally, there has also been an increasing acceptance of the use of qualitative research methods. Many Occupational Psychology researchers and practitioners agree that they can be extremely useful for certain research questions and also to explore the meaning behind patterns of data. Indeed, as King states: 'the goal of any qualitative research … is … to see the research topic from the perspective of the [individual], and to understand how and why they have come to this particular perspective' (2004: 11). It is possible to understand why qualitative research can be considered useful in organisational contexts because data gathered is likely to be salient and personally relevant to the employees, and explanations for events are provided from the employee and *not* the researcher's point of view. Indeed, qualitative research methods allow participants to expand on responses and discuss certain issues, adding detail that they consider relevant to the topic (MacKenzie-Davey and Arnold, 2000). This is not possible when closed-response questionnaire items are used (Symon et al., 2000). Indeed, there has certainly been an increasing synergy between researchers advocating either quantitative or qualitative techniques (Patterson, 2001). Often mixed methods approaches are used since in organisational research there might be a need to both examine the patterns of data and explore the meaning behind the pattern of data. For example, an organisation might find that a high percentage of their new recruits are leaving after only six months on a particular job. The organisation might use quantitative techniques to explore the pattern of data and find that a higher percentage of younger than older employees are likely to leave after a few months and also that male employees were statistically more likely to leave than female. Without using any qualitative techniques, such as exit interviews, it would be impossible to understand why so many people are leaving. So, in this instance, qualitative methods would provide contextual meaning and further understanding of the initial finding. To read further about analytical techniques, see Chapter 3.

Summary

This chapter started out by exploring what the UK might 'look like' in the future in order to highlight how this might affect the workplace. We have also summarised

the key emerging trends and possible future directions in Occupational Psychology, based on information from all our authors and contributing practitioners and academics.

Our key areas that we have explored included:

- the impact of technology;
- the impact of the ageing workforce;
- globalisation;
- employee engagement;
- resilience;
- the impact of the 'green' agenda;
- methodological advances.

In the Explore Further section at the end of this section we have indicated where you can get more information on any of these new trends and emerging areas. This is of course not an exhaustive list and, as we have suggested, the world is changing so rapidly that it is likely that new areas will have emerged and grown in importance even before this book is published. Continue to read and gather information from a wide number of sources in the business world and externally in order to keep connected. To refresh on some of these sources, refer back to Chapter 3.

In the next chapter we will conclude by exploring what impact these new and emerging trends may have on the work of Occupational Psychologists in the future, and therefore what the associated skill and knowledge demands may be.

Explore further

- The Office for National Statistics provides interesting research and publications on the state of the UK, including labour market, population, economy and the environment. You can download these articles here: http://www.ons.gov.uk/ons/publications/index.html.
- The Work Foundation is an independent authority on work and its future. It publishes a range of reports that focus on what the future of work might look like. These can be found here: http://www.theworkfoundation.com/Research.

- Gajendran, R.S. and Harrison, D.A. (2007) 'The good, the bad and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences', *Journal of Applied Psychology,* 92 (6): 1524–41.
- Lewis, R., Donaldson-Feilder, E. and Pangallo, A. (2011) 'Developing resilience: an evidence based guide for practitioners', project report. London: The Chartered Institute of Personnel and Development.
- Lewis, R., Donaldson-Feilder, E., and Tharani, T. (2011) 'Management competencies for enhancing employee engagement', project report. London: The Chartered Institute of Personnel and Development.

- Zibarras, L. and Ballinger, C. (2010). Promoting environmental behaviour in the workplace: A survey of UK organisations. Available at: http://www.sbcscot.com/programmes/climate-change/mayday-network-newsletters/pro-environmental-behaviour-a-survey-of-uk-organisations.pdf (accessed 10 January 2011).

Discussion questions

1 What impact do you feel the recession has had upon the work environment here and globally?
2 Consider implications of each of the future trends upon employee's experience of the workplace.
3 How might these future trends impact upon the role of Occupational Psychologists in the future?

References

Back, M.D., Stopfer, J.M., Vazire, S., Gaddis, S., Schmukle, B.E. and Gosling, S.D. (2010) 'Facebook profiles reflect actual personality, not self idealisation', *Psychological Science*, 21: 372–74.

Baruch, Y. (2001) 'The status of research on teleworking and an agenda for future research', *International Journal of Management Reviews*, 3 (2): 113–29.

Carone, G. Costello, D, Guardia, N.D., Mourre, G., Przywara, B., Salomaki, A. (2005)' The economic impact of ageing populations in the EU25 Member States'. European Economy Economic Papers, 236.

Cober, R., Brown, D., Levy, P., Cober, A. and Keeping, L. (2003) 'Organisational web sites: web site content and style as determinants of organisational attraction', *International Journal of Selection and Assessment*, 11 (2–3): 158–69.

Davis, M.C. and Challenger, R. (2009) 'Climate change – warming to the task', *The Psychologist*, 22: 112–14.

Donkin, R. (2009) *The Future of Work*. Basingstoke: MacMillan Publishers.

Ernsting, J., Nicolson, A.N. and Rainford, D.J. (1999) *Aviation Medicine*. Oxford: *Butterworth–Heinemann*.

Gajendran, R.S. and Harrison, D.A. (2007) 'The good, the bad and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences', *Journal of Applied Psychology*, 92 (6): 1524–41.

Govindarajulu, N. and Daily, B.F. (2004) 'Motivating employees for environmental improvement', *Industrial Management & Data Systems*, 104 (4): 364–72.

Jabbour, C.J.C. and Santos, F.C.A. (2008) 'The central role of human resource management in the search for sustainable organisations', *The International Journal of Human Resource Management*, 19 (12): 2133–54.

Kanfer, R. and Ackerman, P.L. (2004) 'Aging, adult development, and work motivation', *The Academy of Management Review*, 29 (3): 440–58.

King, N. (2004) 'Using interviews in qualitative research', in C. Cassell and G. Symon (eds), *Essential Guide to Qualitative Methods in Organizational Research.* London: Sage. pp. 11–22.

Kurland, N.B. and Bailey, D.E. (1999) 'Telework: the advantages and challenges of working here, there and everywhere', *Organisational Dynamics,* 28: 53–67.

Landau, P. (2012) 'What if Facebook timeline was read instead of your CV?', *Guardian.* Available at: http://www.guardian.co.uk/money/work-blog/2012/jan/30/facebook-timeline-employers-applications.

Levinson, D., Darrow, C., Klein, E., Levinson, M. and Braxton, M. (1978) *The Seasons of a Man's Life.* New York: Random House.

Lewis, R., Donaldson-Feilder, E. and Pangallo, A. (2011a) 'Developing resilience: an evidence based guide for practitioners', project report. London: The Chartered Institute of Personnel and Development.

Lewis, R., Donaldson-Feilder, E. and Tharani, T. (2011b) 'Management competencies for enhancing employee engagement', project report. London: The Chartered Institute of Personnel and Development.

Mackenzie-Davey, K.M. and Arnold, J. (2000) 'A multi-method study of accounts of personal change by graduates starting work: self-ratings, categories and women's discourses', *Journal of Occupational and Organizational Psychology*, 73 (4): 461–86.

Morganson, V.J., Major, D.A., Oborn, K.L., Verive, J.M. and Heelan, M.P. (2010) 'Comparing telework locations and traditional work arrangements: differences in work-life balance support, job satisfaction and inclusion', *Journal of Managerial Psychology,* 25 (6): 578–95.

Ng, T. and Feldman, D. (2010) 'The relationships of age with job attitudes: a meta-analysis', *Personnel Psychology*, 63 (3): 677–718.

ONS (2011) National population projections, 2010-based projections. Available at: http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2010-based-projections/index.html (accessed 6 December 2011).

Oskamp, S. (2000) 'Psychological contributions to achieving an ecologically sustainable future for humanity', *Journal of Social Issues*, 56: 373–90.

Parliamentary Office for Science and Technology (2010) Climate change: engagement and behaviour. Available at: http://www.parliament.uk/documents/post/postpn347.pdf (accessed 21 July 2011).

Patterson, F. (2001) 'Developments in work psychology: emerging issues and future trends', *Journal of Occupational and Organisational Psychology*, 74 (4): 381–90.

Patterson, F. and Zibarras, L. (2009) 'Creative problem-solving at work', *General Practice Update*, June: 48–51.

Pfieffelmann, B., Wagner, S.H. and Libkuman, T. (2010) 'Recruiting on corporate web sites: perceptions of fit and attraction', *International Journal of Selection and Assessment,* 18 : 40–7.

Saks, A.M. (2006) 'Antecedents and consequences of employee engagement', *Journal of Managerial Psychology,* 21: 600–619.

Sellen, A. and Harper, R. (2003) *The Myth of the Paperless Office.* London: MIT Press.

Spencer, R. (2011) 'Tunisia riots: reform or be overthrown, US tells Arab states amid fresh riots', *Telegraph.* Available at: http://www.telegraph.co.uk/news/worldnews/africaand indianocean/tunisia/8258077/Tunisia-riots-US-warns-Middle-East-to-reform-or-be-overthrown.html (accessed 31 May 2012).

Sudan, S.K., Ryan, S., Drake, S.D., Sandler, M., Broggs, R. and Giusto, R. (2007) 'Worldwide mobile worker population 2007–2011'. *Forecast 37.*

Super, D. (1980) 'A life-span, life-space approach to career development', *Journal of Vocational Behavior*, 16 (3): 282–98.

Symon, G., Cassell, C. and Dickson, R. (2000) Expanding our research and practice through innovative research methods. *European Journal of Work and Organizational Psychology, 9*(4), 457–462.

Wilkes, R., Frolik, M. and Urwiler, R. (1994) 'Critical issues in developing successful tele-work programmes', *Journal of Management Systems*, 45 (7)30–34.

Windle, M. (1999) 'Critical conceptualisation and measurement issues in the study of resil-ience', in M.D.E.J Glantz and J. Johnson (eds), *Resilience and Development, Positive Life Adaptations.* New York: Kluwer Academic/Plenum. pp. 161–78

Zibarras, L. and Ballinger, C. (2010) Promoting environmental behaviour in the work-place: a survey of UK organisations. London. Available at: http://www.sbcscot.com/programmes/climate-change/mayday-network-newsletters/pro-environmental-behaviour-a-survey-of-uk-organisations.pdf (accessed 10 January 2011).

Zibarras, L. and Ballinger, C. (2011) 'Promoting environmental behaviour in the workplace: a survey of UK organisations', in D. Bartlett (ed.), *The Psychology of Sustainability in the Workplace.* London: BPS. pp. 84–90.