Someone once said that the only sure things in life were death and taxes. We can now add a third sure thing to this list: an aging global workforce. This introductory chapter sets the context for this *Handbook* by reviewing issues contributing to, and the effects of, an aging workforce on individuals, families, organizations and societies as a whole. These issues are then addressed in significantly more detail in the chapters that follow.

The aging workforce has emerged as a major issue for individuals, organizations, and countries (Anderson, 2009; Bloom, Canning & Sevilla, 2003; Hankin, 2004; Hedge, Borman & Lammlein, 2006; Magnus, 2008; Shultz & Adams, 2007). Although interest in an aging workforce might be traced as far back as the 1950s, it has had little impact on policy and practice until recently (see Griffiths, 1997, for a review). Why haven’t governments and organizations responded sooner to these demographic patterns? On the one hand, thinking about these patterns requires thinking in terms of decades rather than years. And politicians are typically concerned with the next political cycle, and business leaders with the short term. In addition, facts and information were hard to come by being spread across a range of different disciplines (e.g., sociology, psychology, gerontology, economics, public policy, business management). Thus countries and organizations are generally not well prepared for these changes (Lam, 2011). There has been some ‘talk’ by governments and organizations but little ‘action’.

It is estimated that the world population will either peak or stabilize around 2050 after growing for hundreds of years at an increasing rate. Much of this is due to a declining birth rate in most economically developed countries. And the population will be aging because of these lower birth rates and better health care resulting in people living longer.
In the US, the senior population will represent over 20 million of the total population within the next 50 years, a dramatic increase in the number of seniors from 2000 (US Census Bureau, 2005). Between 1950 and 2000, the percentage of the world’s population older than 60 grew about 8–10%; from 2000 to 2050, this figure is expected to more than double to reach 21%. In Japan and Western Europe, there they predict a 40% increase during the latter time period.

An aging workforce, a declining birth rate, and a trend to earlier retirement have come together to create skills shortage, termed a ‘war for talent’ by some (Michaels, Handfield-Jones & Axelrod, 2001). This is reflected in both labor shortages (loss of older employees through retirement, more difficulty recruiting younger workers, retention of current employees will be more difficult) and skills shortages (loss of experienced older employees, difficulty recruiting younger employees due to increased competition). And although Canada and the US are similar to Japan and Western Europe in terms of lower birth rates and aging populations, both Canada and the US have relatively high rates of immigration to partly offset effects of an aging population. But concerns have emerged in countries encouraging immigration in terms of assimilating immigrants, providing job opportunities for them in more difficult economic times, and addressing concerns about backlash against immigrants – particularly strong in Western Europe.

In order to address these challenges, organizations need to begin a dialogue on what strategy would work best for them, there is no ‘one size fits all’ approach that makes sense (Cappelli & Novelli, 2011) It should, however, start with retention planning to make sure that valuable employees remain throughout the organization, targeted selection that focuses on important knowledge and skills that fill positions in the organization, managing the culture change as older employees leave and new employees join the organization to enshrine the values deemed necessary, and starting an aging workforce dialogue involving central organizational decision makers.

There is increasing discussion of a generation gap. Older workers are enjoying the current level of retirement benefits while younger workers are paying for these benefits. There will be a growing number of retirees and a shrinking number of workers paying for their retirement in the future – perhaps creating a growing generational divide.

In addition societies define aging differently. Are the aged seen as reliant or dependent, as poor or as filling an important place in society? Aging can be seen in some societies as a blessing rather than a problem or difficulty. But there are some obvious burdens that aging places on a society such as increasing health care needs and costs, more elder care, and greater pension demands. In addition older workers get paid more and represent higher costs than do younger workers. But the aged also can represent opportunities as there will be a need for new products and services for the aged. As the aged become a critical mass, in Europe currently a third of the population is over 65, they become a force to be reckoned with. About 90% of the elderly are healthy and they vote at a higher rate than do younger men and women.

On the organizational front, Ernst and Young has conducted surveys (their Aging Workforce Survey) among Fortune 1000 companies and concluded (1) that no single company has developed or implemented a comprehensive solution that addresses the total problem, (2) retaining key employees and maintaining intellectual capital were the human capital issues of greatest concern, increasing in importance over the two most recent surveys, and (3) the impact of the aging workforce extended beyond the executive level to middle management. Their 2007 survey showed that the aging workforce had become a more important concern among these firms: 70% now considered issues of an aging workforce to be important compared to only 38% two years earlier.

Finally, at the individual level, there is increasing evidence about the relationship of
aging and cognitive and coordination skills, changes in needs and priorities, health and physical well-being, financial security and retirement. A recent longitudinal study carried out in the US using a very large sample of retirees reported that men and women who worked in some capacity following retirement fared better both psychologically and physically.

Some countries, including Singapore and many states in India, have extended their retirement age. Most European countries have raised, or are in the process of raising, the age at which state pensions kick in, and while European Union (EU) legislation on age discrimination has not removed the principle of age-based retirement, it has enabled many employees to extend their working lives. Other countries, including Canada, have done away with mandatory retirement allowing individuals who want to work beyond the previously-legislated age of 65 to do so.

AGING, WORK AND SOCIETY

Aging has emerged as a major and urgent issue for individuals, organizations and governments. It is also a rapidly growing area for academic research. Current concerns focus on the implications of aging for economic competitiveness, innovation, public services, health and well-being and education, as well as the implications for relationships and financial transfers between the generations. And this is a truly global phenomenon, affecting not only North America and Europe, but also many Asian societies such as Japan, Taiwan and Hong Kong, Australasia and some Latin American societies.

The OECD, WHO and World Bank have all warned of predictable impending problems. Yet European Union policies on workforce and social aging, for example, are clearly at odds with policies designed for other domains. Public policy fears over pensions sustainability, health provision and workforce supply are nowhere matched by planned interventions and measures to deal with the problems. Where governments have tried to tackle the most significant and immediate challenges, as over public sector pensions, they have met with heated opposition.

INCREASING RESEARCH ATTENTION BEING PAID TO AGING

It should come as no surprise that increased research attention is being devoted to understanding the effects of aging, factors associated with successful aging and ways to improve the quality of life of the elderly. Here are two recent examples of this interest. First, the Canadian government is funding a large longitudinal study of factors associated with successful aging (Teotonio, 2012). It will involve 50,000 people between 45 and 65 and run over 20 years. Information collected will examine biological, behavioral, psychological, spatial, lifestyle and economic factors. Second, an International Conference on Aging, Mobility and Quality of Life was held at the University of Michigan in June 2012. The following appeared on their conference program. Since understanding aging is a multi-disciplinary effort, experts from a variety of fields presented their work: gerontologists/geriatricians; transport researchers, operators and regulators; psychologists, behavioral researchers; urban planning researchers and policy makers; safety researchers; mechanical/electrical engineers form industry and academia (vehicle design, assistive technologies); tourism/leisure researchers/industry; occupational therapists; and medical professionals. Content streams fell into two broad categories. One considered mobility-related characteristics and activities of elderly people and included spatial cognition and way finding, social participation, travel behavior, exercise and health, tourism and leisure, personal security, transport safety and aging in developing and newly industrializing countries. A second considered technological and policy responses such as building designs, urban
planning and environmental design, roadway design, vehicle design, ICT, assistive technologies, gerontechnology, transport policy, and community transport.

ISSUES RAISED BY AN AGING WORKFORCE: CHALLENGES AND OPPORTUNITIES

A staggering challenge

The aging population has been described in dramatic ways by terms such as ‘a demographic time bomb’ and an ‘old age tsunami’. This somewhat apocalyptic language has even become something of a cliché, but it should not disguise the unprecedented nature of this change. According to the United Nations, the elderly population of the world is growing at its fastest rate ever. By 2050, there will be more than two billion people aged 60 or over.

Every day, a few hundred thousand people move into their 60s. These people have talent, experiences, skills and knowledge. There has never been such a large group of people in this category. Societies cannot afford to ‘waste’ or ‘throw away’ these resources (Morrow-Howell, Hinterlong & Sherraden, 2006). But there is a lag between how best to capitalize on these resources and current attitudes and policies.

A shrinking workforce

In France, more than a million people took to the streets in 2010 in protest over plans to raise the retirement age from 60 to 62 in 2018. Germany’s efforts to integrate 3.5 million Turkish immigrants without giving them access to citizenship has failed to incorporate them into German society. Both of these are examples of responses to an aging population. As population growth rates slowed and stopped, fewer working age people were present. The solutions to this problem are to raise the retirement age, encourage more immigration, or both. By 2050, most Western countries will spend 27–30% of their GDP on retirees (Saunders, 2010).

A total fertility rate of 2.1 maintains a country’s population. This figure is now lower in most industrialized countries, and higher in some non-industrialized countries. And 18% of US women reach the end of their childbearing years without giving birth, up from 10% in the 1970s. But this rate had held steady over the past decade. More women with advanced degrees are now having children.

The globalization of business, along with an aging workforce, will increase demands for talent world wide. Some countries (e.g., UK, US, Canada, Germany) relied on immigration to fill the need. The globalization of business has resulted in developing countries such as India and China now coming to these formerly host countries for talent.

REGIONAL DIFFERENCES IN POPULATION AGING AND RETIREMENT

We must also consider regional differences (Blossfeld, Buchholz & Kurz, 2011; Hofacher, 2010) Press, politicians and academics alike have shown considerable interest in the pace of economic growth in East Asia. In explaining the reasons for this Asian growth premium, though, there has been remarkably little attention to demography. Since 1990, Asian nations have undertaken major economic reforms in response to financial crises and other factors, and these have been the major focus in previous studies. More recent research suggests that demographic change has been a major factor contributing to cross-country differences in economic growth through to 2005, leading to an urgent need for policy to offset potential negative effects of aging populations in the future. This is likely to play out very differently in China, India, Japan and Korea, given the very different age balances of their respective workforces. Conventionally, Asian nations are often seen as models
of intergenerational caring, with high levels of respect for older adults in particular. Recent socio-economic changes seem to be impacting intergenerational relationships and care for older generations within Chinese families.

Contrary to popular belief, many more older people live in the developing world than in the rich north. Despite this, the condition of older people and the wider effects of population aging are still peripheral concerns in development policy. This has obvious implications for social policy, economic policy and international aid.

In some countries (US, UK, Denmark) where people retire later, 65–70% of men were still working in their early 60s; in France and Italy, 12–20% worked in their early 60s, and in Spain, 38%. Economic incentives create large differences in retirement age. Countries with early retirement have tax policies, pensions, disability and other measures that encourage people to retire at an earlier age. The 2008 economic collapse has resulted in several countries being in the process of increasing their retirement ages.

Demographic changes in the workforce can affect regional competitiveness. The aging and immigration literatures, though large, are rarely integrated. Immigration, particularly of entrepreneurs and highly skilled workers, can influence regional competitiveness. Countries need to be able to attract and select immigrants that can and will contribute, orient and socialize them to nuances of the host country, and reduce impediments to their contribution (e.g., a lack of host country experience). Poot and Strutt (2012) suggest policy and program efforts to more effectively use immigrants to both increase the size of the available labor force and add to the competitiveness of host countries.

The demographic patterns in developed and developing countries are very different. In developed countries there will be more elderly and fewer young people in the workforce. In developing countries there will be fewer elderly and more younger people in the workforce. These characteristics will continue to increase the gap between rich and poor countries as a result.

**HUMAN RESOURCE MANAGEMENT POLICIES AND PRACTICES**

Most workplaces and jobs have been designed without any regard to capabilities, concerns, limitations, preferences and needs associated with worker age. We need to identify risk factors that pose particular challenges to older workers, and outline strategic proposals for reducing risks to health and well-being, while helping to prolong a productive working life.

Demographic changes in the workplace will require new human resource management (HRM) strategies. As ‘baby boomers’ age, they will likely retire as a group causing a loss of organizational knowledge and memory and the need to recruit in a time of labor shortages (DeLong, 2004). Thus organizations need to develop long-term human resource management strategies that address an aging and shrinking workforce using a ‘resource-based’ view of the organization.

In addition, countries have different policies and legislation related to aging and work and these differences are reflected in HRM practices related to the employment of older workers (Schroeder, Hofacker & Muller-Camen, 2009). For example, Schroeder, Hofacker and Muller-Camen (2009) compared HRM practices in Germany and Britain as they related to employment of older workers.

The relationship between quality of work, health and retirement has also come to the fore. Increasing life expectancy, coupled with ballooning national debt and deficits, call for later retirement ages. Early retirement is caused by pension and social security arrangements, health, and employment conditions. Recent research, mainly European, has shown a strong relationship between quality of work and intended (later) retirement.
Improving work conditions seems like a viable initiative for increasing the available workforce (Ilmarinen, 2001, 2006a; Ilmarinen & Rantaqnen, 1999).

MOTIVATING WORKERS TO CONTINUE WORKING BEYOND THEIR RETIREMENT AGE

Given the looming shortage of workers it may be in some organizations’ best interests to motivate employees to continue working beyond their retirement ages. A central question then becomes why do some people want to stay in the workforce after reaching normal retirement age? Some factors already identified include being in good health, having some financial need, and a high work attachment. Rousseau (2005) suggests that arrangements that employees strike with their employing organization, called i-deals (idiosyncratic deals) also can play a key role in such decisions. I-deals result in highly personalized work arrangements that meet important employee needs. Bal, De Jong, Jansen and Bakker (2012) examined the role of two types of i-deals, as well as two types of unit climates in older working employees’ statements on when they planned to retire. The two types of i-deals were flexibility (e.g., choice in when one starts the work day) and development (e.g., access to training and development opportunities). The two types of work unit climates were accommodative (e.g., older workers are encouraged to retire early) and development (e.g., older workers are encouraged to develop and enhance their skills). They collected data from 1083 employees working in two units within two health care organizations. They found that the presence of flexibility i-deals was positively related to motivation to continue working and that unit climate moderated the relationship of development i-deals and motivation to continue working. One caveat is that the dependent variable was intention to continue working past normal retirement age and not actually continuing to work beyond normal retirement age. But it seems safe to conclude that certain HR initiatives such as the opportunity to create personal i-deals and the creation of work unit climates that support development and the utilization of the skills of older workers (not the encouragement of early retirement) can impact employee continuance.

WORKPLACE CHANGES THAT ACCOMMODATE OLDER WORKERS

It is possible to design a workplace to make the environment more compatible with the abilities of older employees. These changes typically involve redesigning the physical demands of the jobs themselves using ergonomic analyses (less heavy lifting, less time pressure, avoid night work and shift work) and reducing levels of workplace stressors such as overload, ambiguity, conflict, age discrimination, work–family life difficulties often compounded by eldercare responsibilities and being in the sandwich generation.

In an aging workforce, there are significant potential efficiency gains from the use of new technologies. Guidelines for older users are now being developed by standards bodies and are implemented in domains such as Web design. Much of the focus of human factors research has been on improving efficiency in the performance of aging adults in the workforce, but reducing errors and increasing comfort and satisfaction in health-related activities should receive greater attention. Thus it is important to look at the relationship between technological change and workforce aging, and will present proposals for developing healthier and more stress-free workplaces.

Some older workers are more successful than others in maintaining high levels of functioning and contribution in spite of losses in some psychological and biological capabilities. Yet it is not clear what we can understand by career and enterprise among older workers, who frequently face barriers and challenges in maintaining productive working lives. We need to look at the prospects of
employment and self-employment for older workers, in the context of developing concerns over work–life balance in the third age.

AGING AND JOB PERFORMANCE

Several literature reviews have been undertaken examining the relationship between chronological age and various indicators of job performance (e.g., Avolio & Waldman, 1994; Hedge, Borman & Lemmlein, 2006; Posthuma & Campion, 2009; Waldman & Avolio, 1986). These reviews indicated that age accounted for a relatively small amount of variance in worker cognitive, perceptual and psychomotor abilities, job attitudes and job performance. In fact the evidence seems to suggest that one’s mind can function well in middle age and beyond (Strauch, 2010).

Age stereotypes

Posthuma and Campion (2009) offered an extensive review of age stereotypes as they relate to the workplace, evidence relevant to these stereotypes, and human resource management practices that can lessen the impact of these stereotypes. This issue is explored here further in the chapters by Posthuma and Guerrera and by Perry, Hanvongse and Casoinic.

Age stereotypes have relevance for human resource management and work behaviors and experiences of individuals in organizations. Age stereotypes are likely to be both more common and have wider impacts as the workforce ages. And age discrimination is likely to be subtle not flagrant. However, society will need more older workers to remain in the workforce to maintain the economy. In addition, older workers now have to work longer to compensate for pension shortfalls.

Age stereotypes result in organizations not hiring qualified and capable employees. With more older workers remaining in the workforce, it is not surprising that age discrimination lawsuits against employers have increased. These legal challenges are costly to employers.

Posthuma and Campion (2009) define age stereotypes as ‘beliefs and expectations about workers based on their age’ (p. 160). Age stereotypes are typically negative, often inaccurate, and obviously distorted. Age stereotypes have consequences; older employees are less likely to be hired, less often selected for training and development and more often targeted for layoffs (Chiu, Chan, Snape & Redman, 2001).

Posthuma and Campion (2009) examine the evidence for the following age stereotypes:

1. Older workers perform less well, they have lower abilities, less motivation and are less productive.
2. Older workers are resistant to change, they are harder to train, less adaptable, and less flexible.
3. Older workers have lower ability to learn, and lower potential for development.
4. Older workers have shorter job tenures, less time to get benefits of training investments.
5. Older workers are more costly, they get higher wages, use benefits more, and are closer to retirement.
6. Older workers are more dependable, more stable, more loyal, more trustworthy, committed to their jobs, less likely to miss work, and less likely to quit.
7. Older workers get lower ratings in selection interviews and performance appraisals.
8. Older workers are more likely to also hold these age stereotypes.
9. The effects of age stereotypes tend to be reduced when job relevant information is available and used.
10. There is a perception that some jobs should be held by employees of a certain age.
11. Age stereotypes are stronger in certain industries (finance, insurance, retail, IT and computing).
12. There are wide individual differences, and there are larger differences within an age group than across age groups.

Based on their review of published research findings, they found support for the following:

1. There was no evidence that older workers perform less well, have lower levels of motivation and are less productive. In fact job performance can improve with age.
2. When declines occur (flexibility, ability to learn, return on training investments) they were found to be small.
Age was less important to job performance than levels of employee skill and employee health. Older employees did in fact get lower ratings in selection interviews and performance appraisals. Older employees did have a harder time finding jobs, keeping their jobs and getting promoted. Older employees also held the same age stereotypes. Job relevant information reduced the effects of age stereotypes.

Age discrimination legislation

Age discrimination legislation has been introduced in a number of countries over the last decade, with varied consequences. Only recently has it become clearer that age discrimination affects different groups in different ways (Dennis & Thomas, 2007; Powell, 2010). Recent studies suggest that the oldest and youngest workers are most affected, but women workers of all ages appear to face ageist prejudice based on physical appearance and sexuality. Sargeant’s chapter in this volume explores the legal dimensions of age discrimination in greater detail, but it remains unclear how effective legislation can be in countering age discrimination in general, and in particular whether it is capable in its present form of addressing the complex patterns of age discrimination.

The end of mandatory retirement could increase age-discrimination legal cases. Some professional groups and business arrangements such as partnerships (e.g., common among accountants, lawyers, engineers) often require retirement at age 65. Employees in partnerships (usually also owners of the firm) voluntarily sign agreements stating the firm’s retirement policies.

Under human rights legislation, employers may be required to accommodate age differences in the workplace just as they must accommodate the disabled. Employers get around the legislation by laying off a number of employees attributed to a restructuring or downsizing and including some younger workers.

ADDRESSING AGING WORKFORCE ISSUES IN A UNIONIZED WORKPLACE

The presence of unions, associations that have historically advocated financial benefits, due process and protection of their members, is an important factor impacting the readiness of workplaces to adapt to the aging workforce. Though labor unions continue to strive to provide important benefits to older workers (pensions, health care) they seem to be resistant to other options of interest to older workers (e.g., part-time work, flexible work hours). Several ‘new’ challenges facing the union movement as a result of the aging workforce and various options that these challenges present that might be satisfying to both older workers and their employing organizations.

Pitt-Catsouphes, Sano and Matz-Costa (2009), in a study of 578 US organizations employing 50 or more people, examined the effects of a union presence on aging workforce concerns. reported that a union presence was more likely to provide some benefits important to older workers, they were less likely to have a more comprehensive view of flexible work alternatives available to most of their employees. Organizations having unions were less likely to offer health insurance to all employees, and less likely to offer all of the full-time employees family health insurance. In the future, unions are more likely to be more responsive to other needs of older workers, beyond health care and pensions, to the consideration of flexible work arrangements, part-time work, and phased retirement.

ADVANTAGES OF AN AGING POPULATION

Hori, Lehmann, Wah and Wang (2010) identify some possible advantages of an aging population. These include the creation of new services, the opportunities offered by a more diverse workforce, and organizations investing differently in the development of talent.
Benefits to organizations from an aging workforce

Older workers have lots to offer (Shea & Hansen, 2006):

- 42% of boomers want to keep working because it will keep them young, not for financial reasons;
- 22% of Canadians are already working past the age of 65 (Canada Revenue Agency);
- 46% of people who retired between 55 and 60 went back to work (Statistics Canada);

Writing over 15 years ago, Griffiths (1997) proposed both national and organizational solutions such as changing management attitudes towards older workers, training of the workforce, reducing work demands for older workers, changing the work environment to make it more ‘age friendly’, and creating programs in the workplace and in the wider society that support health promotion.

Hedge, Borman and Lammlein (2006) suggest that organizations need to develop strategies (both policies and practices) that support an older workforce. These need to address, at a minimum, concerns about the skills and knowledge obsolescence of older employees, the development of new skills and knowledge, and ways of rewarding and motivating an older workforce. They advocate specific efforts including targeted recruitment, selection and placing older workers in jobs that fit, job redesign for older workers, the use of flexible work arrangements, flexible compensation and benefits possibilities, enhanced levels of training, a greater emphasis on performance management, supports for career management, and retirement planning seminars for older workers.

WHAT ORGANIZATIONS CAN DO TO COUNTER AGE STEREOTYPES

Posthuma and Campion (2009) suggest several initiatives to reduce the prevalence and effects of age stereotypes in the workplace. At the core of these is the creation of a friendlier climate for older workers that simultaneously reduces the effects of age stereotypes. These include:

- rewarding employees for their long tenures;
- rewarding those that are the keepers of organizational memory and knowledge;
- position older workers as a competitive advantage;
- identify areas of decision making where age stereotypes are more likely to exist;
- be alert to potential bias in employee evaluations – it is advantageous to use more ‘objective’ methods and processes that are less open to bias;
- use job-related information to inform perceptions and actions;
- add ‘complexity’ not ‘simplification’ to the jobs of older workers to support learning;
- be on the alert to potential age biases in selection for training and development, and promotion;
- collect and maintain employee data on attendance, cost, and performance;
- develop training offerings that deal with generational differences, age discrimination, and the benefits of an aging workforce;
- devote extra attention to areas in the workplace more likely to practice age discrimination (IT, sales).

AN EMERGING EMPHASIS ON HEALTH PROMOTION

An aging workforce has increased costs to organizations for health-related coverage and for workers becoming ill or injured and preventing them from working. To address this, employing organizations, in concert with national or local governments, are more active today in promoting the health of their workforce (Costa, Goedhard & Ilmarinen, 2005; Hayashi et al., 2010; Siegrist & Wahrendorf, 2009). This emphasis reduces health care costs, prevents chronic illness and injury, and hopefully reduces the incidence of chronic illness. These programs include smoking cessation, nutrition and exercise counselling, obesity prevention, flu vaccinations, physical health examinations, and employee assistance programs. Shepard (1997) has shown the benefits of physical
activity on aging, health and well-being. In addition, physical well-being has been shown to be related to higher levels of mental capital (Cooper, Field, Goswami, Jenkins & Sahakian, 2010).

Benefits of continuing to work

Kalata (2010) reported on the results of a 13-country study showing that work provided an environment that kept individuals functioning optimally. Other evidence indicated that retired individuals did less well on cognitive tests. Why does working matter? Working maintains one’s social and personality skills, the routine of getting up in the morning, dealing with other people, and being prompt, dependable and trustworthy. Adams (2011) reported that 54% of baby boomers will work part time, with 10% retiring to start their own businesses.

Factors influencing the decision to retire

As this chapter was being written, retirement was being rethought (Euwals, De Mooij & Van Vuuren, 2009; Sedlar & Miners, 2007). Factors that may have predicted employee retirement decisions twenty years ago (e.g., Feldman, 1994) may not do so today. Aging populations have put pressure on ‘pay-as-you-go’ pension systems suggesting a trend towards prefunded pension plans. Greater prefunding requires careful risk management, efficient regulation and supervision. More recent economic challenges are also pressing upward shifts in the age of entitlement to statutory pensions. But these attempts to shift responsibilities away from previous pensions regimes have caused enormous social tensions, not only among older adults. In addition there are wide country differences on pensions and retirement.

Most Canadians expect to continue working after retirement. Fifty-five percent of those not retired think they will have to work part time in their current field or in a different field (Blackwell, 2011). Two-thirds of the working Canadian workforce will receive no company pension. In numbers:

- 70 – the age at which 20% of Canadians expect to retire;
- 33 – the percentage who intend to retire before 65;
- 5 – the percentage of employed Canadians who expect to keep working after retirement;
- 75 – the percentage worried they will be poor after retirement;
- 41 – percentage of people aged 18 to 24 who believe they will stop working completely after retirement compared to 27% of people aged 50 to 64 who believe that.

Women tend to be more satisfied with their retirements than are men. Retired individuals reported now spending more money on travel and less money on clothes.

Von Bonsdorff, Huhtanen, Tuomi and Seitsamo (2009), in a longitudinal study, examined the relationship of personal and work-related psychological factors and the early retirement decision among older women and men. Data were collected from 1101 employees over a one-year follow-up period. Gender differences in early retirement intentions were present both at baseline and at the one-year follow-up. Negative perceptions about work and low work and general life satisfaction were associated with early retirement intentions among women. Among men, poor self-rated work ability and perceived poor health were positively associated with early retirement intentions, as were negative perceptions about work. Schultz and Wang (2007) also found that specific physical health conditions influenced retirement decisions. Thus both work- and health-related factors detected in middle age predicted later early retirement intentions.

IMPLICATIONS OF AN AGING WORKFORCE FOR ORGANIZATIONS

Ilmarinen (2006b) suggests that four fundamental changes need to be made to address issues associated with an aging workforce.
These involve societal changes in its attitudes towards aging, increasing the knowledge levels of managers and supervisors in age-related issues, changes in the nature of working life and flexible work arrangements, and changes in the health care services to meet the increasing demands of older workers. Writing elsewhere, Ilmarinen (2006a) identified three levels of intervention here: the organizational, its culture and management attitudes; the work environment, including the use of ergonomics, and analysis and reduction of job demands; and the individual, taking more responsibility for their own health through engaging in physical exercise, weight management, smoking cessation and seeking out training and educational opportunities.

An aging workforce was seen as having three major implications for organizations. First, the possibility of real culture change as older, longer-tenured people used to working in particular ways leave the workplace. Second, a loss of knowledge, talent and long-term relationships as older employees leave. And third, a loss of leadership knowledge, abilities and skills as these experienced people leave.

In order to address these challenges, organizations need to begin a dialogue on what strategy would work best for them; there is no ‘one size fits all’ approach that makes sense. It should however start with retention planning to make sure that valuable employees are retained, succession planning that deals with the expected loss of critical employees throughout the organization, targeted selection that focuses on important knowledge and skills that fill positions in your organization, managing the culture change as older employees leave and new employees join the organization to enshrine the values deemed necessary, and starting an aging workforce dialogue involving central organizational decision makers.

QUALITY OF WORK, HEALTH AND RETIREMENT

Siegrist and Wahrendorf (2009) reported results from the Survey of Health, Ageing, and Retirement in Europe (SHARE) study in which data was collected both before and after retirement from about 35,000 people 50 years of age or older in 15 European countries, examining the relationship between quality of work and intended retirement. They found, as have others (Tuomi, Huuhtanen, Nykyri, et al., 2001) a strong correlation between quality of work and intended retirement across the 15 countries. Good quality of work was associated with a lower percentage of intended retirements from work. This study, in line with that of Westerlund, Kivimäki, Singh-Manoux, and their colleagues (2009) indicates that poor quality of work both reduces the health and well-being of employees and increases the likelihood of their retirement, suggests that both organizational policies and actions, and national policies, need to emphasize the improvement of working life.

DO SOME PEOPLE BENEFIT FROM RETIREMENT?

Westerlund, Vahtera and Ferrie, and their colleagues (2010) found, in a large study of retired employees at a French national gas and electricity company, that retirement was associated with large reductions in mental and physical fatigue as well as smaller decreases in depression. Rates of major chronic diseases did not change with retirement. They attribute improvements with a lessening of worker fatigue.

Aging and health

We need to know more about long-term trends on health and disability among older adults, and to show how these are linked to factors such as socio-economic status, gender, financial well-being, social support and ethnicity, and to identify implications for care and for lifestyles.

As the population ages, there will be an increase in the number of cases of dementia. These individuals will require more support from caregivers for their ailing loved ones.
The costs associated with Canada’s drug program, the spending on medical services and drugs, increase dramatically with age. Health care spending for those over 65 is twice as high as for those under 65, and 7.7 times as high for those aged 90 or older (National Post, 2011). There is some concern that less affluent people over 65 may be spending less on drugs and doctors visits, however, as they face rising costs and fixed incomes.

The Gallup-Healthways Well-being Index (WBI) showed that people over 65 in the US experienced the highest overall well-being. With age, Americans indicated increases in healthy behaviors, more satisfaction with their work environment, and access to necessities. Older Americans reported higher levels of emotional health, less sadness and depression. The over 65 years of age group, however, reported slightly lower levels of life satisfaction and physical health compared to other age groups in the study. Advances in medicine and increased health awareness effects are contributing to a longer life. These instill healthier behaviors to reduce obesity, and stopping smoking.

**Aging and health care**

In 2011, 15% of the Canadian population was 65 or older but will increase to 24% by 2036 (Statistics Canada, 2010). This will require integrated collaboration between health and social services to guarantee care for a growing group of people with multiple chronic ill health conditions (Canadian Institute for Health Information, 2011). Most Canadians believe that the demands placed on the health care system by an aging population will reduce access and lower the quality of health care. The Canadian Medical Association believes that the current health care system will be unable to meet future needs. Factors increasing demands on the health care system include: Canadians not taking responsibility for their own health (33%), an aging population (30%), higher demands and expectations of the system by Canadians (21%), and new medical advances (16%). Thus 51% of Canadians thought that health care services would get worse in 2011, 35% thought it would get better. But it is important not to blame older people and create generational tensions.

**Aging and cognitive performance**

Krieger (2010) reviews studies showing that, on average, it becomes harder to multi-task or remember to complete a task after being distracted by another task as one ages. Cognitive disorders such as senility and dementia were reported by 5% of seniors over 65 according to the Agency for Health Care Research and Quality (AHRQ). Seniors aged 85 and older were more likely to have reported one or more cognitive disorders (18.4%) compared with seniors aged 75 to 84 (6%) and seniors aged 65 to 74 (1.1%). Seniors having more education and higher incomes reported having fewer cognitive impairments. Average annual health care expenses for seniors reporting one or more cognitive disorders totalled $15,549 compared to $9,019 for seniors without any cognitive disorders.

**Alzheimer’s and dementia**

In a newly released report (2012), the World Health Organization (WHO) stated that about 36 million people currently live with dementia worldwide, more than half (58%) living in low- and middle-income countries. They estimate that this figure will rise by over 70% by 2050. Treating and caring for those with dementia currently costs more than US$604 billion per year due to loss of income of those with dementia and their caregivers, and the provision of health and social care.

Only eight countries worldwide have national programs to address dementia. Countries need to improve early diagnosis, raise public awareness of the disease and reduce its stigma, and offer more support and
better care to caregivers. Early diagnosis, even in wealthy countries, falls short. Only one-fifth to one-half of dementia cases are identified. Sadly, individuals with dementia and their families are typically isolated.

Strengthening care giving is vital. Most care giving is undertaken by informal caregivers—partners, children and other family members and friends. Caregivers then are also likely to suffer from depression, anxiety and reduced physical health as well. Caregivers also suffer economically. The WHO recommends developing programs to provide better support to caregivers, making community-based services available to support families so that individuals with dementia do not have to undergo expensive residential care.

Most countries have relatively few doctors that specialize in geriatrics. Among its 68,000 doctors, Canada has fewer than 300 that specialize in geriatrics. The number of people in their eighties is increasing, escalating the health care burden in Canada about $18,000 per person, a year. And 65 and over is the fastest growing age group in Canada, estimated to be 23% of the population by 2031.

**Generational wars**

Some have suggested that the increasing number of seniors in retirement will put additional demands on younger women and men still in the workforce to contribute additional monies to their support (Johnson, 2011; Kotlikoff & Burns, 2004). In this regard, Germany is contemplating placing extra taxes on the young to pay for the costs of supporting increasing numbers of older people, a 'demographic reserve' tax (Waterfield, 2012). It would apply to people over 25, thought to be one percent of income. This scenario suggests a generational war for resources. But viewing increased longevity as adding more years to mid-life rather than at the end might suggest a different outcome. Millions of women and men continuing to make contributions to society in their later mid-life could increase economic and psychological well-being of countries.

**Generational tensions?**

There may not be generational war but there seems to be generational tension. Fairlie’s chapter examines claims and evidence on generational differences on the importance of work. Recent studies have shown that Generation X-ers, born between 1961 and 1981, and now in their 40s and 50s, may be getting plateaued in mid-career as baby boomers born in 1960 and earlier remain in their jobs longer and educated younger Gen Y-ers, born between 1982 and 2000, are being promoted faster (Flavelle, 2012). These findings emerged in a study of Canadian banks conducted by Price Waterhouse and Coopers. Generation X-ers comprised the largest of the three groups (60%). Twenty percent of Gen Y women and men were promoted in a three-year period (2008–2012) while only ten percent of Gen X-ers were promoted in the same time period. Although carried out in banking, these findings likely apply to other industries as well. They suggest that organizations need to pay special attention to keeping Gen X-ers engaged.

‘Age Rage’ is a label put on negative attitudes that the young have towards seniors who are seen as getting a ‘free ride’ (Cravit, 2012). The reality does not seem to support this anger. First, seniors have paid taxes, and more taxes, than any other age group as well as paying into their countries’ pension and old age security systems. Second, more government money allocated to pensions and health care reflects growth in the number of seniors. Third, seniors continue to make contributions through still working and taking care of the needs of their parents and children. More children are still at home living with their parents and ‘multi-generational’ families have increased in number as well. Thus seniors seem to be still contributing and not exploiting the young (Kohli, 2004).

**INTERGENERATIONAL RELATIONSHIPS IN THE WORKPLACE**

As the workforce ages, more employers will be supervising others older than they are.
Employees will have to value older workers and training younger managers on how to manage them. There will be a need to value older workers for their experience, training, mentoring, knowledge, and their workplace needs for flexibility and respect. There will also be a need to involve older workers in decision making, recognizing their experience and contributions, delegate smartly. Older people’s needs include feeling valued, continuing to be productive, keeping mentally strong, a flexible schedule with reduced work hours.

Generational conflicts are inevitable (Alsop, 2008; Erickson, 2009, 2008), but manageable. Individuals have different views on approaches to balancing work and life. Individuals in organizations need to listen to each other and make accommodations. Some organizational interventions have also been proposed; these include training programs involving older and Generation Y employees, and feedback sessions in which employees are asked to identify potential issues across generations and offer suggestions for improvements.

The best is to combine the skills, experience of older and younger employees. But there can be clashes and tensions between younger and older employees. It has been noted that some Gen X-ers, born between 1961 and 1974, can be unimpressed with older workers. It works best if the workplace becomes a democracy in that older more experienced workers do not tell younger employees what to do but instead an open dialogue is encouraged between different age groups.

DelCampo, Haggerty, Haney and Knippel (2010) explore the multi-generational workforce. They observe four distinct and different generations in the workplace. Each generation has different expectations, beliefs, values, wants and approaches to learning. As a result, they work differently, creating the possibility of tension and misunderstandings.

Managing these four generations raises challenges for organizations. Firms need to create coordinating processes and a culture supporting communication, cooperation among all workforce generations. Managers need to see generational differences as strengths not as liabilities. In time, the newest generation termed Gen Y or Millennials will come to change the workplace.

A new vision of aging

Advocacy groups (Canadian Association of Retired People, American Association of Retired People) have been working to foster a new vision of aging and champion the needs of the elderly. They have worked tirelessly on three fronts: Advocacy – health care, pensions, eldercare; Benefits – getting discounts on insurance, entertainment, educational offerings; and Community – social events organized by various chapters.

Freedman (2011) proposes a ‘third stage’, the period between middle and old age – roughly between 60 and 80 – in adult development. With people living longer, having them navigate a long period of retirement will be difficult, and a waste of talent, for both individuals and societies.

People’s lives were traditionally seen as having three phases: education, work and retirement. Advances in health care have extended lives. The knowledge economy has made jobs physically easier. But retiring early may no longer be common (financial constraints, demographic factors, small company pensions).

People today are more interested in working past ‘normal or expected’ retirement ages due in part to better health, being in second marriages, and more having children still needing financial support.

Staying at work supports mental and physical well-being (as a result of social interactions, and a sense of meaning).

The third stage

Increasing longevity has caused experts in aging to rethink life stages. Previously, retirement followed mid-life. Now there seems to be a gap, another stage, between mid-life and
retirement (Freedman, 2011). Phrases such as ‘the young old’, and the ‘working retired’ have been used to describe this period or stage. Laslett (1991) called this period the ‘third age’. This stage might also last several years with millions of women and men in it. This stage is also different from the ‘mid life crisis’ concept in that rather than being a time of turmoil, regret and dissatisfaction, with some individuals making radical life changes (e.g., divorce, cosmetic surgery, dramatic and unpredictable changes in careers). Instead the third stage is a time for creative reinvention (Bateson, 2010; Bedell & Young, 2009; Freedman, 2007).

Millions of women and men, now in their fifties and sixties, are examining their lives and their futures, looking both back and forward. Most of these people are now free to think about what they see as important, how to use their talents and experience, rather than being assigned to retirement. Laslett (1991), in fact, describes this stage as an opportunity for fulfillment, a time for new learning, development growth, and new possibilities (Hannon, 2010). Central questions that might be considered include: Am I just getting started now or am I half finished? What might be next? How long will I continue to feel energetic and young? We don’t live forever. What does it feel like to be getting older in a society that values the young? Freedman (2011) identifies two challenges for third stage women and men. One is internal – involving psychological and identity issues. The other is external – involving structural factors in society. What might we now do in a lengthening time period before retirement? Individuals at this point consider time lived and the experiences and skills they have accumulated in this journey; time left to live – this generally involves identifying what and who is important to them, what really matters, and time beyond one’s life – the issue of generativity, how can I make the world and future better.

Freedman (2011) offers ten approaches to helping individuals in the third stage (see also Field, 2011). These involve efforts by individuals, organizations, and various levels of government.

1. **Think differently.** A need to think differently and imaginatively about the period between mid-life and old age.
2. **Create the category.** We need to give credibility to the existence of the third stage.
3. **A gap year for grown-ups.** Make time available in mid-life for reflection, renewal and new directions.
4. **Higher education.** Provide support for continued self- and human capital development.
5. **National service.** A need to create vehicles for participating in community service ventures.
6. **Elevate encore careers.** Support the notion of second careers and working longer before retiring.
7. **Revamp HR policies.** There is a need to create HR policies and programs that help employees transition to a new stage of work and life. Examples include: flextime to care for aging parents or grandchildren, part-time or part-year jobs, training to update skills, and reducing/stopping age discrimination in hiring.
8. **Individual purpose accounts. (and more).** Making money and resources available to support the transition (e.g. back to school, skills retraining).
9. **An Encore Bill.** Developing and passing legislation and policies supporting men and women in the third stage such as developing their human capital, dealing with financial concerns, and making the switch to new life and work roles.
10. **Get organized.** There is a need to develop a social movement of individuals and organizations that benefit from these changes to the third stage and support it.

**AGING GRACEFULLY**

Valliant (1977, 2003) reports findings from the study of Adult Development conducted at Harvard University. This study followed three separate cohorts of 824 women and men, all selected as teenagers and followed them for over 50 years. The respondents came from different social classes, races, education levels, and places of residence. The sample included 268 advantaged Harvard graduates, 456 socially disadvantaged university men (blue collar), and 90 middle
class intellectually gifted women. Respondents were seen several times over this period. Data collection involved social history, childhood history, psychological and physical health assessments, work and marital experiences and satisfactions, social relationships and life satisfaction.

Here are some of the results.

- Alcohol abuse was associated with unsuccessful aging since it damages social relationships.
- Learning to play and to create following retirement, and learning how to add younger friends as older ones were lost, added more to life satisfaction than retirement income.
- Objective good physical health was less important to successful aging than subjective good health.
- A good marriage at 50 was associated with successful aging at 80 whereas low cholesterol levels were not.
- Those enjoying their lives aged more successfully.
- Individuals that accepted their lives aged more successfully.
- Individuals that helped younger people realize their goals, and those contributing to making their communities better, aged more successfully.
- Individuals that aged successfully accepted the realities of aging.
- Better physical health was predicted by not smoking or not being a heavy smoker, not abusing alcohol, having a stable marriage, undertaking some exercise, not being overweight and having an adaptive coping style, termed mature psychological defences. Those in better physical health more often saw positives instead of negatives.

Freedman and Martin (2012), based on over 1500 people from the Terman 80-year longitudinal study at Stanford, examined predictors of a long life. People living long lives were more conscientious, worked hard and were socially connected. Conscientious people were responsible organized, pragmatic, planful, more successful in their careers, encountered fewer stressors as a result, were in more stable marriages and careers, and drank less and were less likely to smoke. All lives have Ups and Downs but perseverance is associated with a more fulfilling life experience (Wheatley, 2010). Somewhat surprisingly, cheerful, happy-go-lucky people had the greatest risk of dying early (White, 2011). Freedman and Martin’s work seems to debunk several myths about living to an old age such as the benefits of exercising, being religious, and staying married.

**SOME CONCLUSIONS**

A review of key demographic, health and attitude findings related to the aging workforce

- There has been a large increase in life expectancy after 1900.
- There has been a very large increase in the elderly over 65, and a decrease in individuals under 15 years of age and between 15 and 40.
- Increases in those over 65 and decreases in those under 15 are worldwide.
- Women continue to live longer than men.
- There will be more years post-retirement, estimated to be 19.0 for men and 23.1 for women.
- In 2000 the world population was relatively young but by 2025 the world population will have aged considerably (particularly among those 60 and older).
- Fewer workers to retire.
- There will likely be a labor shortage.
- Fewer elderly people now have physical or mental limitations that prevent them from working.
- Major reasons for continuing to work involve a need for money, enjoyment of the job and of working, to save money for one’s retirement, and to have the resources to maintain one’s health insurance.

Some ‘big picture’ issues raised in this review

- There is an urgent need to get the economy growing to deal with the aging population and the high levels of unemployment, particularly among youth.
- Most countries need to cut their budget deficits while increasing their investments in growth.
Unfortunately all developed countries are facing large budget deficits. The citizens of some countries are resisting attempts by their governments to cut their budget deficits by reducing services to them, raising the age of retirement, reducing levels of pensions, and raising taxes. How to have an older worker population work longer without harming their health, the prospects of younger workers, and organizational productivity. There seem to be potential tensions or paradoxes in coming to grips with an aging workforce and aging population including: the elderly and the young, growth and budget cutting, developed countries and developing countries, global competition and international collaboration strategies, individuals and countries having higher standards of living and individuals and countries having lower standards of living, immigration and increasing unemployment levels of locals.

The need for an integrated approach to the aging population

There needs to be a worldwide collaboration if societies are to deal with an aging global population effectively. Some initiatives that have been proposed include the following.

• Creating jobs for people in their sixties and seventies.
• Developing educational programs for people in their sixties and seventis.
• Dealing with dementia and Alzheimer’s.
• Offering incentives for companies to keep people working longer. For example, offering bonuses to workers staying until 70, exempt employers from paying taxes for employees beyond retirement age, more flexible work schedules, telecommuting options, and sabbaticals for education and training.
• Governments need to make the ‘aging population’ a priority, viewing ‘aging’ as a cause.
• Slow down increases in health care spending and require the elderly to pay a larger share of their own health care costs.

The chapters in this Handbook demonstrate the extensive range of policy initiatives being adopted to address the challenges and opportunities of societal aging, as well as summarising key areas of recent and current research in this critical area. Part 1 opens by identifying some of the key challenges for scholars and policy makers, starting with a long view of population aging in an historical perspective, and placing the issue in its wider global context. Part 2 sharpens the focus to highlight key aspects of aging within the contemporary workplace, which is followed by a series of discussions of management challenges and concerns in Part 3. The chapters in Part 4 turn the spotlight onto the wider social implications of population aging, or at any rate on what we regard as some critical examples of this broader canvas. Finally, we turn to the central policy debates in Part 5. The contributors have approached their subjects from a variety of disciplinary perspectives and national experiences, and with the aim of contributing to a debate that will continue to develop rapidly in the future.

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REFERENCES


