18

Work, Retirement and Aging

Mo Wang¹ and Junqi Shi²

¹Department of Management, Warrington College of Business Administration, University of Florida, Gainesville, FL, USA ²Department of Management, Lingnan (University) College, Sun Yat-sen University, Guangzhou, China

OUTLINE			
Aging in the Work Context Work and Cognitive Aging EOR for Aging Workers Aging in the Context of HRM Employee Benefits Knowledge Transfer Strategy Motivation and Performance Management Retention and Recruitment	340 340 341 343 343 344 345 346	Aging and Work–Family Issues The Transition from Work to Retirement: The Temporal Process and Outcomes The Temporal Process Model of Retirement Outcomes of Retirement Conclusions and Future Directions References	349 349 352 354 356

In this chapter, we discuss how the aging process is intertwined with two important aspects of life experiences: work and retirement. Following Hulin (2002), we define work as paid employment activities. It is well-recognized that work provides many things and meanings to our life, including income, security and autonomy, identity and self-esteem, relationships outside of the family, opportunities to develop skills and creativity, and a structure to everyday life (Hulin, 2002). Further, following Shultz and Wang (2011), we define retirement as an individual's

exit from the workforce, which accompanies decreased psychological commitment to and behavioral withdrawal from work. This definition is consistent with the argument made by life stage developmental theories that retirement is a life stage that not only corresponds to decreased levels of physical activities and productivities, but also involves lowered stress and less responsibility to others in day-to-day life (Levinson & Levinson, 1996; Super, 1990). As such, one's aging process often coincides with the transition from work to retirement.

Demographic projections have shown that by 2050, more than 20% of the total US population will be age 65 or older, up from 13% in 2010, which is likely to lead to a sizable increase in the number of people who will transit from work to retirement in the next four decades (Vincent & Velkoff, 2010). This demographic change pattern is also demonstrated and projected by data from other countries and regions (e.g., the European Union, Japan, China, and India; Tyers & Shi, 2007), reflecting the fact that the population as a whole is getting older due to several factors, such as the aging of the large Baby Boom Generation, lower birth rates, and longer life expectancies (Wheaton & Crimmins, 2013). Therefore, workforce aging and retirement have become important research topics in psychology, gerontology, sociology, economics, and business management (Wang & Shi, 2014; Wang & Shultz, 2010).

This chapter is organized in the following ways. We first discuss how individuals' aging experiences may be shaped by the work context. In particular, we focus on examining the relationship between work and cognitive aging, the employee-organization relationship (EOR) for aging workers, aging in the context of human resource management (HRM), and aging and work family issues. We then discuss the issues associated with individuals' transition from work to retirement. Specifically, we review the temporal process model of retirement (Shultz & Wang, 2011; Wang & Shi, 2014) to depict the process through which workers transit from work to retirement. We also review research on major retirement outcomes, including financial wellbeing, physical well-being, and psychological well-being. We conclude this chapter by pointing to some general future research directions.

AGING IN THE WORK CONTEXT

Work may be one of the most important social contexts for individuals who enter their adulthood and remain so until they fully exit from the workforce (Hulin, 2002; Wang, Olson, & Shultz, 2013). Research has consistently shown that work and organizations play important roles in shaping people's cognitive functioning (Schooler, Mulatu, & Oates, 2004), knowledge and skills (Goldstein & Ford, 2002), values and motivations (Ostroff, Kinicki, & Muhammad, 2012), emotional experiences (Wang, Liao, Zhan, & Shi, 2011; Wang, Liu, Liao, Gong, Kammeyer-Mueller, & Shi, 2013), and social relationships (Ferrin, Dirks, & Shah, 2006). Therefore, in this section, we examine how work context may shape individuals' aging experience in four aspects. First, we focus on how work itself may shape cognitive functioning during the aging process. In particular, we review evidence related to the use-it-or-lose-it hypothesis (Denney, 1984; Salthouse, 2006) that links work activities to individuals' cognitive development. Second, we examine how EOR may evolve for older workers and may influence their retirementrelated decisions. Third, we examine how organization's HRM practices may influence aging individuals' experience at work. Given that HRM practices often lead to financial and motivational consequences for employees and are likely to trigger the sense making process of employees, it is important to understand the impact of HRM practices on older workers (Wang et al., 2013). Finally, older workers may also experience unique challenges and opportunities in managing the interface between their work and family roles (Allen & Shockley, 2012). As such, we examine how these challenges and opportunities may shape workers' aging experience.

Work and Cognitive Aging

As Bowen, Noack, and Staudinger (2011) pointed out, when studying the effect of work on cognitive development, much research has focused on the association between the degree of cognitive stimulation at work and concurrent

or later patterns of cognitive functioning. The main guiding theoretical perspective for this research topic is the use-it-or-lose-it hypothesis (Denney, 1984). This hypothesis argues that changes in cognitive functioning, especially aging-related reduction in cognitive capacities, are in part due to the disuse of certain skills and abilities and the lack of cognitive challenges throughout one's adulthood and old age. This is because exposure to complex cognitive challenges can stimulate beneficial changes in the brain (e.g., the generation of new dendritic branches and more synapses; van Praag, Kempermann, & Gage, 2000), which may create more cognitive repertoire and enhance the brain's ability to compensate for age-related reduction in cognition.

Longitudinal research has largely supported the use-it-or-lose-it hypothesis in the work context. For example, Schooler et al. (2004) demonstrated that the self-directedness of work (measured as a combination of job complexity, routinization, and the closeness of supervision) affected workers' intellectual functioning 20 years later in a stronger degree than intellectual functioning affected self-directedness, after controlling for the effects of age, gender, race, and education. Further, using data from a large sample of World War II veterans, Potter, Helms, and Plassman (2007) found that intellectual demands and human interaction at work were positively associated with cognitive functioning, after controlling for early adulthood intelligence, age, and education. They also found that individuals with lower levels of initial intelligence in young adulthood benefitted more from intellectually demanding work than those with higher levels of initial intelligence. These findings are consistent with findings from the longitudinal Maastricht Aging Study (Bosma et al., 2003), which showed that older people with mentally demanding jobs had lower risks of developing cognitive impairment 3 years later, after controlling for the baseline intellectual abilities as well as a number of individual differences (e.g., age, gender, education, family history of dementia, etc.). Finally, a population-based study of Swedish twins (Andel et al., 2005) found that the work complexity of an individual's predominant life-time occupation was negatively associated with the incidence of dementia and Alzheimer's disease.

Another set of evidence for the use-it-orlose-it hypothesis in the work context comes from research that investigates retirement's effect on older adults' cognitive functioning. For example, Schaie (2005) found that workers with more complex and less routine jobs suffered a greater cognitive decline following retirement than those with less complex, more routine jobs. Similarly, Finkel, Andel, Gatz, and Pedersen (2009) found that following retirement, individuals previously holding jobs with high complexity of work exhibited faster rate of decline in their spatial ability than those previously holding jobs with low complexity of work. Finally, Rohwedder and Willis (2010) found that retirement, defined by "not working for pay," was associated with decreased memory as measured by word recall. Given that retirement has conventionally been viewed as indicating lack of work activities (cf. Wang & Shi, 2014; Wang & Shultz, 2010), these patterns seem to suggest that complex working tasks and challenging day-to-day work activities may help protect one's cognitive functioning from aging-related reduction, supporting the use-itor-lose-it hypothesis.

EOR for Aging Workers

Although the focus of previous research on EOR has varied, a common theme that emerges is that EOR has been conceptualized as a resource exchange state between the organization and the employee (Shore, Coyle-Shapiro, & Tetrick, 2012). Specifically, when the organization hires an employee, a sequence of beneficial exchanges initiates between the organization and the employee (Wang et al., 2013; Wang &

Zhan, 2012). The typical benefits employees receive from their organizations may include economic/material benefits, informational benefits, time benefits, and socioemotional benefits. The typical benefits organizations may receive from their employees include productivity, organizational citizenship behaviors, and loyalty (Cropanzano & Mitchell, 2005; Tsui, Pearce, Porter, & Tripoli, 1997). These beneficial exchanges evolve to create feelings of mutual obligation between the exchange partners and lead them to develop trust that beneficial treatment will continue to be reciprocated by the exchange partner (Cropanzano & Mitchell, 2005). In addition, these beneficial exchanges are governed by the norm of reciprocity, which refers to the norm that the bestowing of a benefit creates an obligation to reciprocate in social exchange (Gouldner, 1960). Therefore, employees generally feel obligated to respond equitably to treatments from their organizations and expect reciprocation to their contributions to the organization.

Although it appears that each employee's perception of EOR is largely determined by the organizational treatment that he or she receives, it is important to recognize that depending on the unique things that are valued by different employees (e.g., younger vs. older employees), the same organizational treatment may lead to different perceptions of EOR for different employees (Wang et al., 2013). Therefore, older workers' retirement-related decisions may be a unique type of reciprocation triggered by their perceptions of EOR. For example, although poor perception of EOR may lead to workers' withdrawal intention from the organization, such withdrawal intention may translate into job search and turnover decisions for younger workers, but retirement decisions for older workers. In other words, poor EOR could trigger older workers to engage in the gradual process of exiting the workforce (Shultz & Wang, 2011; Wang & Shultz, 2010). In particular, once older workers perceive their organizations

to be less supportive, less willing to provide discretionary benefits to them, and even discriminating against older workers, they will be more likely to withdraw from the organizations in the form of retirement as reciprocating to organizations' withdrawing resources from them (Wang et al., 2013).

Further, it is important to recognize that older workers who perceive high levels of EOR may expect better treatment from organizations when they approach retirement age. For example, older workers tend to compare their working status with their expected postretirement life in planning their retirement decisions (Wang & Shultz, 2010). On the one hand, they value their work role identity; on the other hand, they expect less demands and more personal time during retirement. As such, older workers with higher levels of EOR may be more likely to expect a better supportive system from their organizations, such as flexible work schedule and respect for older workers. Therefore, positive EOR may encourage older workers to continue working in their organizations by satisfying the older workers' expectation of reduced work commitment without losing their work role identity (Wang et al., 2013). Similarly, Zappala, Depolo, Fraccaroli, Guglielmi, and Sarchielli (2008) have also shown that older workers tended to retire late if the management team in their company displayed special attention to maintain the employability of older workers and the supervisors took into account their age, health, and capacity when assigning tasks and conducting evaluations.

It is necessary to point out that the relationship between EOR and retirement intention and decision is not exclusively negative. The impact of EOR on retirement intention/decision may vary due to the different strategic goals adopted by organizations. In particular, positive EOR may lead to an increased rather than decreased tendency to retire if organizations strategically encourage employees' retirement

(Wang & Zhan, 2012). With a higher level of EOR, older workers may also tend to expect a satisfying retirement package and healthcare package from their organizations. Therefore, a pleasant retirement process may occur for older workers retiring from organizations with which they have positive EOR. Below, we continue our discussion on workers' aging experience by focusing on HRM as a relevant aspect of the work context.

Aging in the Context of HRM

Researchers have argued that a firm's HR practices need to not only match the strategy and environment constraints, but also meet the needs of different groups of employees (Lepak & Snell, 2002; Tsui et al., 1997). For example, younger workers will have different needs compared to older workers. Therefore, differentiated systems of HR practices are needed to address both the needs of various constituents within the organization and the contingencies posed by the organization's strategy and environment (Wang et al., 2013).

Given these distinctions, a different attitude toward older workers could be expected by virtue of the organization's strategy and supporting culture of HRM. For example, according to Porter's (1985) categorization of business strategies, under an innovation/differentiation strategy (i.e., basing the business growth on high levels of employee creativity, long-term focus, greater willingness to take risks, and high tolerance for ambiguity and unpredictability), the organization may wish to design HR practices that will retain the knowledgeable employees to the organization for longer periods of time and take advantage of their willingness to take risks. Under a cost leadership strategy (i.e., basing the business growth on managing predictable and repetitive behaviors of employees), the organization's culture of stability and low risktaking might best be supported by HR practices that minimize risk of turnover for mid-aged workers while encouraging an earlier retirement date for older workers to limit the cost. Therefore, when matching HR practices to any of these business strategies, it is important for an organization to understand its anticipated human capital (e.g., skills and knowledge) need relative to future corporate objectives and anticipatory changes in the business environment (Sackett & Laczo, 2003, Chapter 2). After such workforce planning goals are clarified, various HR practices can be adopted to support the future growing anticipations of the company. The HR practices that are most relevant to older workers include employee benefits, knowledge transfer strategy, motivation and performance management, and retention and recruitment (Wang et al., 2013).

Employee Benefits

Organizations typically offer benefits to their employees for three purposes: (i) to meet their goals for corporate social responsibility, (ii) to attract and retain workers, and (iii) to increase productivity and foster positive work-related attitudes among employees. As such, practices on employee benefits are important ways for an organization to carry out its HR strategy. From the standpoint of older workers, the two most important categories of employee benefits are likely to be health care benefit and retirement benefit (Wang et al., 2013). With physical aging, health care is an important factor to consider for older workers, especially given the recent rapid increase in health care cost. However, employers are often not required by law to provide health insurance coverage for their employees or their retirees. Therefore, the decision by an employer to offer health care benefits and the manner in which they are offered are based on a number of firm strategic goal-related factors. At the most basic level, employers provide benefits to align older workers' behaviors and attitudes with organizational strategy before they retire and to a certain degree offset the financial burden

that is due to the health care cost incurred by the employees, and sometimes their families (especially for those single-earner families with kids). Employers may also provide health care benefits to their employees after they retire to offer some security and continuance, which is also beneficial for maintaining the tie between the retirees and the company. It is important to point out that regardless of the employer intention to provide health care benefits, older workers typically benefit from this HR practice in terms of both the health care quality and financial subsidy (Wang et al., 2013).

However, these goals for providing health care benefits do not always coincide with one another. For example, an organization may want to foster long-term relationships with their older employees by demonstrating legitimate concerns for their long-term welfare even after retirement. Retiree health benefits would seem to be one mechanism to accomplish this strategic goal. However, these types of benefits are costly and the research suggests that older employees are as much as 21% more likely to retire if they have access to retiree health benefits (Robinson & Clark, 2010). The same is true for the case of early retirement. For example, Strumpf (2009) showed that a retiree health insurance offer may increase the probability of early retirement by over one-third for both men and women. Thus, rather than encouraging longer tenure, this type of health benefit practice might actually encourage older workers to retire if its costs can be justified for that purpose.

Another type of employee benefit that is important to older workers is retirement benefit. The main way in which organizations help workers with their retirement preparation is through the provision of retirement-related financial benefits, in the form of funding defined benefit (DB) plans or defined contribution (DC) plans (Wang et al., 2013). The DB plans specify a particular benefit payout level once the employee retires. Under the

typical payout rules, the largest payouts occur for those who have remained with a single employer for a long period of time and have their highest earnings with that employer. Therefore, for organizations offering DB plans, it is most likely to translate into high retention rates among mid-aged workers, while pushing workers to consider retirement when they are eligible for social security payment. The latter is particularly likely to be the case if the sum of the social security income and the income from the DB plans is close to or equal to the salary income coming from full-time working.

In DC plans the amount of payout upon retirement is not specified but an amount of investment contribution from the organization is. The payout at retirement is based on how well the investment account has performed. DC plans are portable; employees may transfer their account into other retirement accounts when they leave an organization. For older workers who enrolled in the DC plans, they will be less mindful about their retirement benefits when they consider alternative jobs. However, due to the market risk, older workers may have to postpone their retirement in adverse economic situations because of their loss in the retirement investment in the DC plans. This may also be an important factor to drive older workers to continue working, as it is difficult to be sure whether there will be sufficient market stability in their retirement years so that their investment in the DC plans can provide them with a sustainable stream of income.

Knowledge Transfer Strategy

With older workers approaching retirement age, one important issue faced by organizations is the potential loss of accumulated knowledge (Wang & Shultz, 2010). In order to retain the accumulated knowledge of its retiring employees, organizations need to implement a knowledge transfer strategy to identify and transfer valuable knowledge so that it can be used by

others to achieve organizational objectives (Slagter, 2007). Key elements of the knowledge transfer process aimed at older workers include facilitating an organizational culture that supports knowledge transfer and developing and deploying specific tools needed to achieve knowledge transfer. This culture may be manifested by: (i) valuing employees nearing retirement for what they know, (ii) creating mutual respect and trust among the parties to the process, and (iii) an emphasis on learning and development (Slagter, 2007). HRM practices such as reward and recognition programs can facilitate the development of such a culture. In most cases, these cultural elements are effective in facilitating older workers to transfer their knowledge to a younger generation of workers (Stevens, 2010).

Establishing an effective knowledge transfer strategy has important implications for enhancing older workers' experience in organizations. Specifically, such strategy encourages and values knowledge-seeking on the part of the younger workers and knowledge-sharing on the part of older workers who are in their mid and late careers. In addition, the supportive knowledge transfer culture can also facilitate the fulfillment of the generative motivation for older workers and make them feel valued by the organization and their younger colleagues. In turn, older workers may be willing to remain in the organization longer and find their work to be more meaningful and significant, or once retired, more willing to return to their organization to serve in a mentoring role (Madvig & Shultz, 2008).

Motivation and Performance Management

A firm's motivation and performance management strategy may also impact older workers' aging experience at work. While there is little empirical evidence to suggest motivation and performance necessarily decline with age, there is growing evidence that there is something unique about motivating older workers

(Kanfer & Ackerman, 2004; Ng & Feldman, 2010; Zhan, Wang, & Yao, 2013). Techniques that work on younger workers may not be effective on older workers nearing retirement. For example, Warr (1997, 2001) argued that older workers' job preferences are more likely to include things like security (physical, job, financial) and opportunities to utilize their skills rather than high job demands, job variety, and feedback. Thus, as workers age, organizations may find that they are not motivated by the same things as in the past. This suggests that the reward structure may need to be realigned with older workers' needs and desires. For example, Claes and Heymans (2008) conducted focus group sessions with HR managers and identified three sources of motivation that might be particularly important for older workers. First, HR managers indicated that older workers attached more importance to having contact with their superiors, a relationship with the business owner, and having opportunities to take on responsibility and consequently were more motivated when these conditions were met. Second, HR managers suggested that older workers were more motivated when they were given clear goals that were challenging and time-related. Third, HR managers observed that older workers were highly motivated by the opportunities to mentor others, pass along their knowledge, and recognition for their efforts.

Given that few empirical studies have been conducted in evaluating effective HR practices that are designed to manage older workers' work motivation, it is still unclear how workers' aging experience may be shaped in this arena. Nevertheless, to match motivation practices with the organization's strategy, it is important to understand the source of low motivation among older workers (Wang et al., 2013). Further, whether the organization wishes to encourage older workers to retire or wishes to extend older workers' value in the workplace is important. As with other HR practices

discussed earlier, a company concerned about cost containment may wish to encourage retirement of older, more expensive workers. These organizations could adopt more agebased policies and practices that establish an implied retirement age and climate. In particular, they may offer early retirement, create benefits for retired employees, or designate an age for phased retirement eligibility. On the other hand, an organization that focuses on quality of service, product, or processes may wish to extend the work life of older, knowledgeable workers for as long as possible. HR policies and practices that accommodate older workers' changing physical and cognitive challenges (e.g., job redesign, ergonomic changes, job reassignment, and career development) should increase work motivation for older workers. Accommodating older workers' changing preferences for leisure and work may also encourage them to stay in the workplace longer, albeit with reduced hours but perhaps with sustained motivation.

Finally, it is important to recognize that organizations are often not active in managing older workers' motivation and performance due to age-related stereotypes (Posthuma & Campion, 2009). Organizational leaders may hold negative biases about older workers because they see them as either: (i) not having the necessary skills and most current technical knowledge, or (ii) not willing/able to learn new skills that are required to complete their work and perform at the same level as their younger counterparts (Cappelli & Novelli, 2010). These biases against older workers are often linked to a lack of understanding of the talents that older workers bring to their work roles coupled with management/human resource practices that reinforce these biases (i.e., giving training opportunities predominantly to younger workers so that we invest in our future, older people will retire sooner and we will not receive a payback on the training investment). While it may be true that some older workers do not want to

work the same number of hours, and they may not have the same goals and aspirations as they did earlier in their careers, there are also many younger workers who do not want to work longer hours and do not aspire to higher-level positions either.

Retention and Recruitment

Retention refers to the set of HR practices aimed at retaining workers in the organization. Different workers may have the intention to leave the organizations for different reasons. Identifying these reasons and providing solutions that could address the worker's concerns are important challenges to an organization's HR system in terms of its flexibility and its adherence to the organization's business strategy. For example, an older worker may decide to leave the organization due to elder care needs. In that case, accommodating the employee with flexible work schedules may successfully address the problem without significantly losing the productivity (Matz-Costa & Pitt-Catsouphes, 2010). On the other hand, an employee who is approaching retirement may be retained to work on a part-time basis. This may involve the use of phased retirement (i.e., the continuing employment of current employees at a reduced workload until full retirement) and contingent work arrangements (i.e., rehiring retired workers as independent contractors or as "temporary" workers through staffing effort; Shultz, 2003). In addition, one recent study found that HR practices such as training and development targeting older workers was positively related to perceptions of organizational support, which was, in turn, related to intention to remain with one's employer (Armstrong-Stassen & Ursel, 2009).

When considering finding the talent from the external labor force that is accessible to an organization, the key HR practice is recruitment. Recruitment is the process of attracting potential employees to apply for open positions in an organization. In one national study

of 578 organizations, approximately 62% had taken steps to recruit an age-diverse workforce (Pitts-Catsouphes, Matz-Costa, & Besen, 2009). Several typical HR practices used to recruit older workers and retirees include: (i) flexible work options, (ii) training and development opportunities, (iii) new, challenging, and meaningful work assignments, (iv) improved compensation, (v) unbiased feedback and performance evaluation, and (vi) giving recognition and respect (Armstrong-Stassen, 2008a, 2008b). Further, in order to be effective in recruitment these types of practices have to be communicated in a manner that signals to retirees that the organization values their contributions (Rau & Adams, 2005; Wang et al., 2013).

It is important to recognize that both retention and recruitment practices targeted at older workers can be challenging to implement for organizational reasons as well as legal and regulatory reasons. Many of the suggestions for both retention and recruiting rely on the notion of creating part-time work (reduced responsibility, fewer hours per day, fewer days per week, seasonal employment) and creating contingent work arrangements. While these are attractive to older workers, part-time work is not the most optimal configuration for all jobs (Wang et al., 2013). In addition, organizations might have legitimate concerns about the job performance of some of its employees. In this case, certain retirements, like other types of turnover, may be very functional.

Aging and Work-Family Issues

Workers do not live in a social vacuum. In addition to their work roles, they also have important family roles in life. Previous research has shown that having to manage multiple roles associated with work and family domains has both positive and negative implications (Allen & Shockley, 2012). Work–family conflict (WFC) occurs when the pressures associated with work versus family roles are incompatible.

Conflict can arise in two different directions, from work to family (work interference with family [WIF]) and from family to work (family interference with work [FIW]) (Greenhaus & Allen 2011). Compared to FIW, WIF is more common among employees. Research has shown that expectations linked with work and family roles can lead to employee physical and psychological strain in two ways (Allen & Shockley, 2012). First, the demands of multiple roles can lead to an overall increase in workload. Second, suppositions surrounding either of these roles can arouse pressures that command the time of an individual and disrupt the expectations associated with the performance of the other role.

On the other hand, balancing between demands from work and family can have positive implications. The role enhancement perspective suggests that fulfilling role demands from one domain can lead to positive outcomes in the other, which is characterized by workfamily enhancement (WFE) (Greenhaus & Allen, 2011). Specifically, work enhancement of family (WEF) occurs when benefits are derived from work and applied to the family domain. For example, employees may apply new communication skills learned from work to facilitate their communications at home. In addition, family enhancement of work (FEW) describes the instances where benefits from the family are applied to work. For example, providing care to an important elder and knowing that they are in good hands, could help an individual focus more on their work.

Because of their position in the lifespan, older workers may experience unique challenges and opportunities associated with managing their work and family roles. In terms of challenges, first, older workers are likely to have the responsibility of caring for aging parents, commonly referred to as eldercare. Eldercare represents a unique challenge for older workers because research suggests that caring for aging parents can be more stressful than caring

for children. Eldercare may not be anticipated, and unlike childcare responsibilities, eldercare tends to become more onerous over time and ultimately ends in the death of the care receiver (Kossek, Colquitt, & Noe, 2001). Home- or family-based care makes one less able to separate from the care recipients' deterioration and emotional or health problems, which may add to the caregivers' distress. This is especially true when the care receiver is approaching death. The caregiver may experience increased depression and WFC, and lower well-being. Ultimately, their performance for work and family roles may suffer. For example, primary caregivers for an aging parent are more likely to take unpaid leaves from work, reduce their work hours, and rearrange their work schedules (Kossek et al., 2001). In addition, those who spend more time caring for their aging parents tend to have more work interruptions such as telephone calls related to their care responsibilities. As such, they are likely to experience higher levels of FIW (Gottlieb, Kelloway, & Fraboni, 1994).

A second challenge faced by older workers is the requirement to simultaneously manage eldercare and childcare responsibilities with work role demands. These individuals are referred to as sandwiched caregivers, who care for both adults and children at the same time. Providing care for parents and children at the same time may represent a qualitatively different experience compared to providing care to either group alone. Research suggests that the breadth (i.e., the number of caregiving roles one holds) of caregiving, rather than the depth (i.e., the intensity of the caregiving requirements), is what increases distress (Gerstel & Gallagher, 1993). The result of multiple caregiving roles can be a competition for the caregiver's time, energy, and resources, which can lead to distress for the caregiver. Increased responsibilities from multiple caregiving roles among older adults have been shown to lead to decreased physical and mental health over time (Haug, Ford, Stange, Noelker, & Gaines, 1999).

In terms of opportunities, older workers may develop positive, meaningful relationships with their care recipients, which may lead to FEW through transfer of positive affect and other resources (Greenhaus & Allen, 2011). Older female employees' positive work experiences have also been shown to offset the negative stress associated with simultaneous caregiving, demonstrated WEF. Thus, having high-quality role experiences at work and family may represent a unique opportunity for older workers to balance the rewards and stress associated with managing multiple role demands (Martire & Stephens, 2003). In addition, holding multiple roles across different domains (e.g., as employees, spouses, parents, etc.) helps older workers validate their self and gain esteem through enacting meaning, guidance, direction, and purpose through their roles (Greenfield & Marks, 2004). This suggests that older workers may uniquely benefit from successful management of work and family roles, and experience higher levels of WFE.

A number of organizational practices have been designed to assist employees to manage work-family issues, some of which may be particularly beneficial for older workers. First, flexible work arrangements regarding schedule and location, such as flexitime, a compressed work-week, and telecommuting, have been implemented to reduce time-based WFC. These arrangements are highly effective, being cited by employed parents as the most important family-friendly benefits offered by organizations (Baltes, Briggs, Huff, Wright, & Neuman, 1999). These flexible arrangements have also been shown to be positively related to productivity, job satisfaction, and work schedule satisfaction, and negatively related to absenteeism (Allen & Shockley, 2012).

Second, organizations may provide dependent care to help meet employees' caregiving needs. Dependent care may take in the form of on-site day care, on-site care for sick children, off-site day care, an in-home nurse for

care of dependents, or special care services such as elder care. Traditionally, such benefits have focused on providing care for young children. Increasingly, organizations have started to provide support for caring for older parents (Mesmer-Magnus & Viswesvaran, 2006). Adequate dependent care was strongly linked to reports of lower WFC. As older employees have increased caregiving responsibilities for their aging parents, provision of dependent care by the organization may be particularly beneficial for older workers.

THE TRANSITION FROM WORK TO RETIREMENT: THE TEMPORAL PROCESS AND OUTCOMES

Having discussed how work context may shape individuals' aging experiences, we now shift our attention to how individuals may transit out of the workforce and enter retirement. In particular, we review the temporal process model of retirement (Shultz & Wang, 2011; Wang & Shi, 2014) to provide a heuristic description of the process through which workers transit from work to retirement. In addition, we review major outcomes associated with retirement, including financial well-being, physical well-being, and psychological well-being in retirement.

The Temporal Process Model of Retirement

The temporal process model of retirement suggests that the process for one to transit from work to retirement usually consists of three broad and sequential phases: retirement planning, retirement decision making, and retirement transition and adjustment (Shultz & Wang, 2011; Wang & Shi, 2014). Specifically, the process starts with a distal preretirement preparation and planning phase (i.e., retirement planning) where individuals begin to

envision what their retirement might entail and begin discussing those plans with friends, family members, and colleagues. Through this process, retirement planning helps to generate more accurate expectations for retirement life as well as mobilizing and organizing resources to serve the needs in the coming retirement (Taylor & Schaffer, 2013). In particular, Taylor-Carter, Cook, and Weinberg (1997) categorize retirement planning into financial and cognitive planning. The goal of financial planning is to find a balance between revenue income and revenue expenditure that allows the individual to maintain a desired lifestyle in retirement. Given that there often are social security and employer-provided pension funds for retirees to some degree, the focus of financial planning for retirement is on private savings (Hershey, Jacobs-Lawson, & Austin, 2013). Regarding cognitive planning for retirement, according to Adams and Rau (2011), the goal is to address four key questions: What will I do? How will I afford it? Where will I live? Who will I share it with? Answering these questions requires the individual to gather large amounts of information about the current situation (e.g., amount of current funds or current state of health) as well as to use cognitive skills to make predictions about possible futures (e.g., community involvement or working state of a spouse; Leung & Earl, 2012; Wang, 2007). Previous research has demonstrated that retirement planning in both financial and cognitive ways is crucial for structure, social interaction, and maintaining a standard of living into retirement (Taylor & Schaffer, 2013).

Next, as retirement gets closer, one enters the retirement decision-making phase. During this phase, one has to weigh the values of work and leisure over time against individual circumstances to make the retirement decision (Shultz & Wang, 2011; Wang & Shi, 2014). Some researchers have attempted to specify the retirement decision-making phase into smaller stages. One line of this research focuses on the

ways that capture the thought-change process concerning retirement decision making. In particular, Feldman and Beehr (2011) categorize the retirement decision-making phase into three stages: imagining the possibility, assessing when it is time to let go of the job, and putting concrete plans into action at present. These three stages characterize a cognitive process that first brainstorms possible futures, then considers the past experiences at work, and finally uses the compiled information to take steps toward retirement in the present (Feldman & Beehr, 2011). Another line of research decomposes the phase of the retirement decision making in terms of the decision elements. Specifically, Jex and Grosch (2013) separate the content of the retirement decision into three key elements: the decision to audit and gather resources needed for retirement, the decision to actually retire, and the decision to choose the form that retirement will take. For example, people can engage in intense retirement planning without actually deciding when to retire. There also exists a distinction between the retirement forms of complete withdrawal from the workforce and continuing to work in another capacity (e.g., working for reduced hours or reduced physical load; Jex & Grosch, 2013).

Sometimes the individual may also be faced with the decision of whether to retire early. Early retirement has been defined as exiting the workforce before an individual is eligible for receiving social security benefit and/ or pension (Damman, Henkens, & Kalmijn, 2011; Feldman, 1994). As such, in the United States, early retirement is usually operationalized as retiring before age 62 (i.e., the earliest one can start receiving social security benefit). Recently, Feldman (2013) argued that one's status of early retirement is at least partly subjective as well. In other words, whether a person retires early also depends on whether the retirement happens at an age that is younger than one's expected retirement age (Potocnik, Tordera, & Peiro, 2010; Wang, 2007). This subjective component for defining early retirement has become more and more prominent, given that continuous technology advancement and health care improvement have allowed people to work longer, even after they take early retirement incentives (Kim & Feldman, 2000). This subjective definition also emphasizes the role of perceived person–environment (P–E) fit in making early retirement decisions, as people who perceive poor P–E fit with their work are more likely to exit the workforce early (Feldman, 2013; Herrbach, Mignonac, Vandenberghe, & Negrini, 2009).

Finally, as individuals make the transition from full-time worker to retiree, they enter the phase of retirement transition and adjustment. The most prominent component of this adjustment process involves daily activity changes. Retirees have many options for how to spend their time after entering retirement, including leisure activities, volunteer work, and various forms of paid work (Adams & Rau, 2011). Among them, leisure activities are characterized by enjoyment, novelty, relaxation, companionship, aesthetic appreciation and intimacy, including talking to or visiting friends and family, involvement in clubs and organizations, religious activity, physical activity such as exercise and sports, and hobby activity such as gardening, arts, and crafts (Nimrod, Janke, & Kleiber, 2009). Volunteer work can involve housework and caring for one's family members as well as formally volunteering outside the home in business and civic organizations (Dosman, Fast, Chapman, & Keating, 2006).

After entering retirement, one may continue with some paid work. This type of work activity is referred to as bridge employment, which is defined as the pattern of labor force participation exhibited by older workers as they leave their career jobs and move toward complete labor force withdrawal (Feldman, 1994; Shultz, 2003; Wang, Adams, Beehr, & Shultz, 2009). Recent studies have documented the high prevalence of engagement in bridge

employment among retirees in the United States. For example, Brown, Aumann, Pitt-Catsouphes, Galinsky, and Bond (2010) showed that over 20% of workers age 50 and older who reported themselves as being retired were also working for pay at the same time, which suggests a much higher prevalence rate for retirees to take at least one bridge job before completely exiting the labor force. They also found that 75% of workers aged 50 and older expect to have a paid job during retirement. Similarly, Giandrea, Cahill, and Quinn (2009) using the Health and Retirement Study (HRS) data from 1998 through 2006 found that among those aged 51–56 in 1998, 64% moved to a bridge job prior to exiting the labor force completely. This labor force transition pattern is corroborated by Wang and Chan's (2011) finding from analyzing the HRS data with mixed latent Markov modeling technique. Cahill, Giandrea, and Quinn (2013) have noted that many financial factors could motivate an individual to seek further work after retirement, such as an increasing age to qualify for social security benefits, a decline of traditional DB plans in favor of DC plans (like 401ks), and improved labor market earnings. Individuals may also try to mitigate and adapt to the lifestyle change in retirement by continuing workforce participation (Wang & Shultz, 2010).

Bridge employment can take many different forms. When the work hours in bridge employment are reduced compared to the preretirement job, the bridge job operates in the form of phased retirement, which has been shown to help retirees to ease into their retirement (Wang et al., 2009). From the organizational perspective, one can continue working for one's preretirement employer or for a different employer either full-time or part-time when entering retirement (Jones & McIntosh, 2010; Zhan et al., 2013). From the career perspective, bridge employment can also take two forms: career bridge employment, in which the individual works in the same industry or field as the

individual's career job, and bridge employment in a different field (Feldman, 1994; Shultz, 2003; Wang, Zhan, Liu, & Shultz, 2008). Previous research suggests that a psychological attachment to the career and incentives given by companies to keep their skilled labor force make it likely for an individual to keep working in the form of career bridge employment, whereas a need to change working conditions contributes to bridge employment in a different field (Wang et al., 2008). Nevertheless, both forms of bridge employment can also be the result of lack of retirement planning (Wang et al., 2008).

Using the temporal process model to describe and understand the transition from work to retirement allows researchers to investigate retirement as it unfolds over time from one phase to another (Wang & Shi, 2014). The general unfolding sequence established by this model helps researchers to further examine the interdependence among these retirement phases (e.g., how these stages influence one another and how they together influence the long-term adjustment outcomes of retirement; Shultz & Wang, 2011). However, it is important to note that this temporal process is not homogeneous across individuals. Within the broad phases are smaller and shorter segments that individuals go through as they approach retirement, transition through the retirement decision-making process, and begin life as a self-designated retiree. In addition, this process is unlikely to go smoothly for all retirees. Some older individuals enter retirement experiencing ambivalence, anxiety, fear, depression, and a deep feeling of loss. As research summarized by Brown, Fukunaga, Umemoto, and Wicker (1996) and O'Rand (2003) shows, disabled individuals, individuals from traditionally disadvantaged race and ethnic groups, those from lower social classes, undocumented immigrants, the economically needy, individuals who have never worked, and the chronically unemployed will approach the retirement planning, decision-making, and transition and

adjustment processes with vastly different experiences and perspectives. Thus, this temporal process model of retirement reinforces the need to examine the unique psychological dynamics that each individual faces as they transition through their own retirement process (Wang & Shi, 2014).

Outcomes of Retirement

In this section, we review major outcomes associated with retirement. These outcomes include financial well-being, physical wellbeing, and psychological well-being in retirement, which are often studied as indicators of adjustment to retirement life (Wang & Shi, 2014). However, it is important to recognize that retirement as a single life event is rarely the cause of these outcomes. Rather, as suggested by the resource-based dynamic model for retirement adjustment (Wang, Henkens, & van Solinge, 2011), it is the resource-related factors or changes associated with the retirement process that are driving these outcomes. As such, following Wang and Shi (2014), our discussion here also emphasizes various factors embedded in the retirement process that may influence these outcomes.

Financial well-being. A retiree's financial wellbeing can be defined as the extent to which the person feels satisfied with his/her financial status and is able to maintain effective financial functioning (e.g., receive stable income that will fully cover his/her expenses; Wang, 2012). Among various individual attributes that influence financial well-being in retirement, financial literacy is the one that receives the most attention. Dozens of investigations have been carried out on financial literacy during the past two decades, which have revealed that the extent and veracity of one's domain-specific knowledge in finance is related to financial well-being after retirement (for a review, see Lusardi, 2011). Another important individual attribute that influences financial well-being

in retirement is how clear a person is regarding his/her financial goals after retirement. The clarity of one's financial goals has been shown to predict perceived financial preparedness for and financial well-being in retirement (Noone, Stephens, & Alpass, 2010; Stawski, Hershey, & Jacobs-Lawson, 2007).

Not surprisingly, engagement in pre-retirement financial planning has been repeatedly documented to lead to better financial wellbeing in retirement. Specifically, financial planning is associated with increased saving for retirement, improved budgeting, and established long-term investment plans (Hershey, Henkens, & Van Dalen, 2007). Further, people who received additional financial incentives to retire (e.g., taking early retirement incentives or redundancy packages) are often more likely to be financially better off when entering retirement (Quick & Moen, 1998). In contrast, unemployment right before retirement may pose a risk to retirees' financial well-being because it is often harder for older adults to find jobs that offer the amount of salary that is comparable to what they had before they were laid off (Pinquart & Schindler, 2007). Therefore, they may have to dip into their savings before entering retirement, which creates financial pressure later in retirement.

The number of dependents and costs related to dependent care often jeopardize people's financial well-being in retirement. The more dependents the retiree has and the more cost incurred due to the dependent(s), the more likely financial well-being in retirement will suffer (Marshall, Clarke, & Ballantyne, 2001). Further, for retirees who are in poor financial situations, working after retirement often provides additional income for their retirement, thus easing their financial difficulty (Quinn, 2010). However, it is also known that retirees often seek bridge employment opportunities because of financial hardship (Cahill et al., 2013). Therefore, the causal relationship between bridge employment and financial well-being is unclear.

Physical well-being. Following the contemporary wellness perspective adopted by the public health literature, a retiree's physical well-being can be defined as the extent to which there is absence of physical diseases (e.g., heart disease and cancer) and functional limitations (e.g., the lack of capability to handle daily life and engage in social activities; Jex Wang, & Zarubin, 2007; Zhan, Wang, Liu, & Shultz, 2009). It is not surprising that retirees' pre-retirement health status is most predictive of their physical wellbeing in retirement (Zhan et al., 2009). This is consistent with the notion that genetic and allostatic factors (i.e., the accumulated cost for our body to adapt to the changing social and physical environments in which we live) are the dominant causes for major diseases (Wang & Shultz, 2010). Further, healthy behaviors and habits, such as exercise, healthy diet, absence of drug and alcohol dependence, and hygiene are important for maintaining physical well-being in retirement as well (Wang, 2012).

Job-related physical demands have been documented as a factor related to physical wellbeing in retirement. People who retire from highly demanding physical jobs are more likely to experience worse cardiovascular health when they enter retirement, although over time it may improve (Wang, 2012). People's health insurances in retirement are also related to their physical well-being. Retirees typically enjoy better physical well-being when their health insurances offer more extensive service coverage and incur lower out-of-pocket costs (Stanton, 2006). In addition, retirees with betterquality and consistency of health care are also more likely to have better physical well-being in retirement (Singh, 2006).

Among post-retirement activities, research has unequivocally shown that retirees who engaged in bridge employment and voluntary work had fewer major diseases and functional limitations than retirees who chose full retirement (Cahill et al., 2013; Dave, Rashad, & Spasojevic, 2008). In fact, it has been found that

engaging in bridge employment showed no differential effects on individuals' physical well-being as compared to continuing work without official retirement (Zhan et al, 2009). This suggests that it is the level of physical and/or cognitive activities in working behaviors that help to maintain retirees' physical health.

Psychosocial well-being. A retiree's psychological well-being can be defined as the extent to which the person is generally content with his/ her psychological states and enjoys effective psychological functioning (Wang, 2012). Using the nationally representative longitudinal data from the US HRS and growth mixture modeling technique, Wang (2007) was able to demonstrate that over an 8-year period of retirement transition and adjustment process, about 70% of retirees experienced minimum psychological well-being changes; about 25% of retirees experienced negative changes in psychological wellbeing during the initial transition stage, but showed improvements afterwards; and about 5% of retirees experienced positive changes in psychological well-being. These findings were further corroborated by Pinguart and Schindler (2007), who used a nationally representative sample of German retirees from the German Study. Socioeconomic Panel Specifically, Pinguart and Schindler (2007) found that during retirement transition and adjustment, about 75% of German retirees experienced trivial changes in life satisfaction; about 9% of German retirees experienced significant decrease in their life satisfaction during the initial transition stage, but continued on a stable or increasing life satisfaction thereafter; and about 15% of German retirees experienced significant increase in their life satisfaction. Although the proportion estimates for subpopulations were not entirely the same across American and German retirees, both studies support the multiple-pathway nature of retirement transition and adjustment, suggesting that retirees' psychological well-being does not follow a uniform transition and adjustment pattern.

Retirees' work role identity has been shown to be negatively related to retirees' psychological well-being (Quick & Moen, 1998; Reitzes & Mutran, 2004). In particular, retirees who strongly identify themselves to their work roles are often more likely to experience decreases in psychological well-being when entering retirement. Further, people who retire from jobs that involve high levels of work stress, psychological and physical demands, job challenges, and job dissatisfaction are more likely to enter retirement with low levels of psychological well-being (Quick & Moen, 1998; van Solinge & Henkens, 2008; Wang, 2007). Finally, people who experienced unemployment right before retirement are also more likely to enter retirement with low levels of psychological well-being (Marshall et al., 2001; Pinquart & Schindler, 2007).

Among retirement transition-related factors, the voluntariness of the retirement (Reitzes & Mutran, 2004; van Solinge & Henkens, 2007) and retirement planning (Petkoska & Earl, 2009; Reitzes & Mutran, 2004; Wang, 2007) have been shown to be positively related to retirees' psychological well-being. People who retire earlier than expected or planned are more likely to experience decreased psychological wellbeing entering retirement (Quick & Moen, 1998; Wang, 2007). Further, people who retire for health reasons are more likely to experience decreased psychological well-being, whereas those who retire to become engaged in leisure or other non-work-related activities and those who receive financial incentives or redundancy payouts are more likely to experience better psychological well-being in retirement (Quick & Moen, 1998).

Among post-retirement activities, bridge employment (Kim & Feldman, 2000; Wang, 2007; Zhan et al., 2009), volunteer work (Dorfman & Douglas, 2005; Kim & Feldman, 2000), and leisure activities (Dorfman & Douglas, 2005) are all beneficial to retirees'

psychological well-being. Further, when retirees work for generative reasons (i.e., working for teaching and sharing knowledge with the younger generation), they are more likely to experience improved psychological well-being (Dendinger, Adams, & Jacobson, 2005). Finally, retirees' anxiety associated with maintaining their social status and contacts via social activities was negatively related to retirement satisfaction (van Solinge & Henkens, 2007, 2008).

Finally, it is important to recognize that retirees' financial, physical, and psychological wellbeing have an important influence on their longevity and mortality (Tsai, Wendt, Doonelly, de Jong, & Ahmed, 2005). They also influence retirees' work-related behaviors. For example, Wang et al. (2008) found that: (i) retirees who had better physical health and experienced less psychological stress were more likely to engage in career bridge employment than full retirement; (ii) retirees who had better physical health and financial conditions were more likely to engage in bridge employment in a different field than full retirement; and (iii) retirees who had better financial conditions and experienced less psychological stress were more likely to engage in career bridge employment than bridge employment in a different field.

CONCLUSIONS AND FUTURE DIRECTIONS

In this chapter, we have reviewed how people's aging experiences are intertwined with their experiences at work and in retirement. It is clear that different aspects of work, such as the work tasks and the organization's practices, can have a profound impact on aging workers. Moreover, maintaining a positive relationship with the employer and successfully balancing the work and family demands are also essential to ensure one's productivity and work motivation in older ages. Further, with the aging of

America and many other countries, perhaps the largest proportion of our society will soon be classified as retired. This is one of the fundamental driving forces for studying retirement as an institutional and society-wide phenomenon. Accordingly, we have reviewed the transition process from work to retirement, as well as important retirement outcomes in this chapter.

Moving forward, we offer two general future research directions for readers to consider. First, the research on work, retirement, and aging phenomena is multidisciplinary in nature, involving research fields such as economics, policy studies, gerontology, sociology, psychology, public health, and management (Wang & Shultz, 2010). Although this multidisciplinary nature inspires diverse ideas and approaches for studying these phenomena, such advantages cannot be fully realized if the multiple disciplines are not communicating with each other. For example, different disciplines may use different terminologies for describing the same essential constructs. This has the danger of leading scholars in different disciplines to rediscover the same basic phenomena over and over, resulting in great concept redundancy. Further, lack of communication regarding different practices in research methods across disciplines may also create unwarranted bias toward the findings generated by a certain research methodology. For example, qualitative research methods have often been viewed as too subjective and less scientific in terms of informing cause–effect conclusions. However, if used rigorously and correctly, qualitative research methods can complement quantitative research methods and offer numerous strengths for constructing theories and hypotheses. As such, it is important for researchers from different disciplines to clearly communicate with each other on the reasons and philosophy behind their methodological choices in studying work, retirement, and aging-related phenomena. This way, knowledge generated from certain methodological

traditions will not go overlooked by the field. It will also be easier to facilitate overall knowledge accumulation in the field.

Second, there is still a great need to accumulate causal knowledge in this research field. On the one hand, to solve real-world problems, work- and retirement-related interventions, practices, and policy decisions at individual, organizational, and societal levels all have to rely on causal knowledge. On the other hand, it is extremely difficult for us to isolate aging, work, and retirement processes from their contexts and study them with experimental design. For example, it is quite impossible for us to manipulate people's ages or retirement statuses and rely on random assignment to remove alternative explanations for interpreting research findings. Thus, we need to invest much more effort when it comes to designing studies in this field and conducting data analysis. In particular, the vast majority of previous studies in this field have relied on crosssectional designs (Wang & Shultz, 2010; Wang et al., 2011). Although cross-sectional designs may be useful in establishing correlations between variables, it is difficult to make sound causal inferences based on such findings. To understand the causal processes, we will also need to understand the time sequence of the changes in variables as well as rule out alternatives. Accordingly, research in this field should use more longitudinal designs to provide more information for understanding the causal processes. For example, in order to improve the internal validity of the research, we can assess the time-lagged effect between predictors and outcomes while controlling for the baseline of the outcome variables (Hanges & Wang, 2012). We can also rule out the possibility of reversed causality by directly test it. Another advantage for using longitudinal designs is that it provides an examination of within-individual change trends in variables, which reveals how time influences variables of interest (Wang, 2007).

References

- Adams, G. A., & Rau, B. L. (2011). Putting off tomorrow what you want today: Planning for retirement. *American Psychologist*, *66*, 180–192.
- Allen, T. D., & Shockley, K. M. (2012). Older workers and work-family issues. In J. W. Hedge & W. C. Borman (Eds.), *The Oxford handbook of work and aging* (pp. 520–537). New York. NY: Oxford University Press, Inc.
- Andel, R., Crowe, M., Pedersen, N. L., Mortimer, J. A., Crimmins, E., Johansson, B., et al. (2005). Complexity of work and risk of Alzheimer's disease: A populationbased study of Swedish twins. *Journals of Gerontology:* Psychological Sciences, 60B, P251–P258.
- Armstrong-Stassen, M. (2008a). Organisational practices and the post-retirement employment experience of older workers. *Human Resource Management Journal*, 18, 36–53
- Armstrong-Stassen, M. (2008b). Factors associated with job content plateauing among older workers. *Career Development International*, *13*, 594–613.
- Armstrong-Stassen, M., & Ursel, N. (2009). Perceived organizational support, career satisfaction, and the retention of older workers. *Journal of Occupational & Organizational Psychology*, 82, 201–220.
- Baltes, B. B., Briggs, T. E., Huff, J. W., Wright, J. A., & Neuman, G. A. (1999). Flexible and compressed workweek schedules: A meta-analysis of their effects on workrelated criteria. *Journal of Applied Psychology*, 84, 496–513.
- Bosma, H., van Boxtel, M. P. J., Ponds, R. W. H. M., Houx, P. J., Burdorf, A., & Jolles, J. (2003). Mental work demands protect against cognitive impairment: MAAS Prospective Cohort Study. Experimental Aging Research, 29, 33–45.
- Bowen, C. E., Noack, C. M. G., & Staudinger, U. M. (2011). Aging in the work context. In K. W. Schaie & S. L. Willis (Eds.), *Handbook of the psychology of aging* (pp. 263–277) (7th ed.). San Diego, CA: Elsevier Academic Press.
- Brown, M., Aumann, K., Pitt-Catsouphes, M., Galinsky, E., & Bond, J. T. (2010). Working in retirement: A 21st century phenomenon. Boston, MA: The Families and Work Institute, and The Sloan Center on Aging and Work at Boston College.
- Brown, M. T., Fukunaga, C., Umemoto, D., & Wicker, L. (1996). Annual review, 1990–1996: Social class, work, and retirement behavior. *Journal of Vocational Behavior*, 49, 159–189.
- Cahill, K. E., Giandrea, M. D., & Quinn, J. E. (2013). Bridge employment. In M. Wang (Ed.), The Oxford handbook of retirement (pp. 293–310). New York, NY: Oxford University Press.
- Cappelli, P., & Novelli, B. (2010). *Managing the older worker: How to prepare for the new organizational order*. Boston,
 MA: Harvard Business School Publishing.

- Claes, R., & Heymans, M. (2008). HR professionals' views on work motivation and retention of older workers: A focus group study. The Career Development International, 13, 95–111.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31, 874–900.
- Damman, M., Henkens, K., & Kalmijn, M. (2011). The impact of midlife educational, work, health, and family experiences on men's early retirement. *The Journals* of Gerontology: Psychological Sciences and Social Sciences, 66B, 617–627.
- Dave, D., Rashad, I., & Spasojevic, J. (2008). The effects of retirement on physical and mental health outcomes. Southern Economic Journal, 75, 497–523.
- Dendinger, V. M., Adams, G. A., & Jacobson, J. D. (2005). Reasons for working and their relationship to retirement attitudes, job satisfaction and occupational self-efficacy of bridge employees. *International Journal of Aging & Human Development*, 61, 21–35.
- Denney, N. W. (1984). A model of cognitive development across the life span. *Developmental Review*, 4, 171–191.
- Dorfman, L. T., & Douglas, K. (2005). Leisure and the retired professor: Occupation matters. *Educational Gerontology*, 31, 343–361.
- Dosman, D., Fast, J., Chapman, S., & Keating, N. (2006). Retirement and productive activity in later life. *Journal of Family and Economic Issues*, 27, 401–419.
- Feldman, D. C. (1994). The decision to retire early: A review and conceptualization. Academy of Management Review, 19, 285–311.
- Feldman, D. C. (2013). Feeling like it's time to retire: A fit perspective on early retirement decisions. In M. Wang (Ed.), *The Oxford handbook of retirement* (pp. 280–292). New York, NY: Oxford University Press.
- Feldman, D. C., & Beehr, T. A. (2011). A three-phase model of retirement decision making. *American Psychologist*, 66, 193–203.
- Ferrin, D. L., Dirks, K. T., & Shah, P. P. (2006). Direct and indirect effects of third-party relationships on interpersonal trust. *Journal of Applied Psychology*, 91, 870–883.
- Finkel, D., Andel, R., Gatz, M., & Pedersen, N. L. (2009). The role of occupational complexity in trajectories of cognitive aging before and after retirement. *Psychology and Aging*, 24, 563–573.
- Gerstel, N., & Gallagher, S. K. (1993). Kinkeeping and distress: Gender, recipients of care, and work-family conflict. *Journal of Marriage and the Family*, 55, 598–608.
- Giandrea, M. D., Cahill, K. E., & Quinn, J. F. (2009). Bridge jobs: A comparison across cohorts. Research on Aging, 31, 549–576.
- Goldstein, I. L., & Ford, J. K. (2002). *Training in organizations: Needs assessment, development, and evaluation* (4th ed.). Belmont, CA: Wadsworth.

REFERENCES 357

- Gottlieb, B. H., Kelloway, E. K., & Fraboni, M. (1994). Aspects of eldercare that place employees at risk. *The Gerontologist*, 34, 815–821.
- Gouldner, A. W. (1960). The norm of reciprocity. *American Sociological Review*, 25, 161–178.
- Greenfield, E. A., & Marks, N. F. (2004). Formal volunteering as a protective factor for older adults' psychological well-being. The Journals of Gerontology: Psychological Sciences and Social Sciences, 59, S258–S264.
- Greenhaus, J. H., & Allen, T. D. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick & L. E. Tetrick (Eds.), Handbook of occupational health psychology (pp. 165–183). Washington, DC: American Psychological Association.
- Hanges, P., & Wang, M. (2012). Seeking the Holy Grail in organizational science: Uncovering causality through research design. In S. W. J. Kozlowski (Ed.), *The Oxford handbook of organizational psychology* (pp. 79–116). New York, NY: Oxford University Press.
- Haug, M. R., Ford, A. B., Stange, K. C., Noelker, L. S., & Gaines, A. D. (1999). Effect of giving care on caregivers' health. *Research on Aging*, 21, 515–538.
- Herrbach, O., Mignonac, K., Vandenberghe, C., & Negrini, A. (2009). Perceived HRM practices, organizational commitment, and voluntary early retirement among late-career managers. Human Resource Management, 48, 895–915.
- Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2007). Mapping the minds of retirement planners. *Journal of Cross-Cultural Psychology*, 38, 361–382.
- Hershey, D. A., Jacobs-Lawson, J. M., & Austin, J. T. (2013).
 Effective financial planning for retirement. In M. Wang (Ed.), The Oxford handbook of retirement (pp. 402–430).
 New York, NY: Oxford University Press.
- Hulin, C. L. (2002). Lessons from industrial and organizational psychology. In J. M. Herman & F. Drasgow (Eds.), *The psychology of work* (pp. 3–22). Mahwah, NJ: Erlbaum.
- Jex, S., & Grosch, J. (2013). Retirement decision making. In M. Wang (Ed.), The Oxford handbook of retirement (pp. 267–279). New York, NY: Oxford University Press.
- Jex, S., Wang, M., & Zarubin, A. (2007). Aging and occupational health. In K. S. Shultz & G. A. Adams (Eds.), Aging and work in the 21st century (pp. 199–224). Mahwah, NI: LEA.
- Jones, D. A., & McIntosh, B. R. (2010). Organizational and occupational commitment in relation to bridge employment and retirement intentions. *Journal of Vocational Behavior*, 77, 290–303.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. Academy of Management Review, 29, 440–458.
- Kim, S., & Feldman, D. C. (2000). Working in retirement: The antecedents of bridge employment and its consequences for quality of life in retirement. *Academy of Management Journal*, 43, 1195–1210.

Kossek, E. E., Colquitt, J. A., & Noe, R. A. (2001). Caregiving decisions, well-being, and performance: The effects of place and provider as a function of dependent type and work-family climates. *Academy of Management Journal*, 44, 29–44.

- Lepak, D., & Snell, S. (2002). Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of Management*, 28, 517–543.
- Leung, C. S. Y., & Earl, J. K. (2012). Retirement resources inventory: Construction, factor structure and psychometric properties. *Journal of Vocational Behavior*, 81, 171–182.
- Levinson, D. J., & Levinson, J. D. (1996). The seasons of a woman's life. New York, NY: Knopf.
- Lusardi, A. (2011). Americans' financial capability. Pension Research Council working paper #2011-02.
- Madvig, T. L., & Shultz, K. S. (2008). Modeling individual's post-retirement behaviors toward their former organization. *Journal of Workplace Behavioral Health*, 23(1&2), 17–49.
- Marshall, V. W., Clarke, P. J., & Ballantyne, P. J. (2001). Instability in the retirement transition: Effects on health and well-being in a Canadian study. *Research on Aging*, 23, 379–409.
- Martire, L. M., & Stephens, M. A. P. (2003). Juggling parent care and employment responsibilities: The dilemmas of adult daughter caregivers in the workforce. *Sex Roles*, 48, 167–173.
- Matz-Costa, C., & Pitt-Catsouphes, M. (2010). Workplace flexibility as an organizational response to the aging of the workforce: A comparison of nonprofit and forprofit organizations. *Journal of Social Service Research*, 36, 68–80.
- Mesmer-Magnus, J. R., & Viswesvaran, C. (2006). How family-friendly work environments affect work/family conflict: A meta-analytic examination. *Journal of Labor Research*, 27, 555–574.
- Ng, T. W. H., & Feldman, D. (2010). The relationships of age with job attitudes: A meta-analysis. *Personnel Psychology*, 63, 677–718.
- Nimrod, G., Janke, M., & Kleiber, D. (2009). Expanding, reducing, concentrating and diffusing: Activity patterns of recent retirees in the United States. *Leisure Sciences*, 31, 37–52.
- Noone, J. H., Stephens, C., & Alpass, F. (2010). The process of retirement planning scale (PRePS): Development and validation. *Psychological Assessment*, 22, 520–531.
- O'Rand, A. (2003). Cumulative advantage and gerontological theory. *Annual Review of Gerontology and Geriatrics*, 22, 14–30.
- Ostroff, C., Kinicki, A. J., & Muhammad, R. S. (2012). Organizational culture and climate. In I. B. Weiner, N. W. Schmitt, & S. Highhouse (Eds.), *Handbook of*

- psychology: Industrial and organizational psychology (pp. 643–676). Hoboken, NJ: John Wiley & Sons.
- Petkoska, J., & Earl, J.K. (2009). Understanding the influence of demographic and psychological variables on retirement planning. *Psychology and Aging*, 24, 245–251.
- Pinquart, M., & Schindler, I. (2007). Changes of life satisfaction in the transition to retirement: A latent-class approach. *Psychology and Aging*, 22, 442–455.
- Pitts-Catsouphes, M., Matz-Costa, C., & Besen, E. (2009). Age & generations: Understanding experiences at the workplace, 6, 1–43, The Sloan Center on Aging & Work at Boston College.
- Porter, M. E. (1985). *Competitive strategy*. New York, NY: The Free Press.
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of Management*, 35, 158–188.
- Potocnik, K., Tordera, N., & Peiro, J. M. (2010). The influence of the early retirement process on satisfaction with early retirement and psychological well-being. *International Journal of Aging and Human Development*, 70, 251–273.
- Potter, G. G., Helms, M. J., & Plassman, B. L. (2007). Associations of job demands and intelligence with cognitive performance among men in late life. *Neurology*, 70, 1803–1808.
- Quick, H. E., & Moen, P. (1998). Gender, employment, and retirement quality: A life course approach to the differential experiences of men and women. *Journal of Occupational Health Psychology*, 1, 44–64.
- Quinn, J. F. (2010). Work, retirement, and the encore career: Elders and the future of the American workforce. *Generations*, 34, 45–55.
- Rau, B., & Adams, G. (2005). Attracting retirees to apply: Desired organizational characteristics of bridge employment. *Journal of Organizational Behavior*, 26, 649–660.
- Reitzes, D. C., & Mutran, E. J. (2004). The transition into retirement: Stages and factors that influence retirement adjustment. *International Journal of Aging and Human Development*, 59, 63–84.
- Robinson, C., & Clark, R. (2010). Retiree health insurance and disengagement from a career job. *Journal of Labor Research*, 31(3), 247–262.
- Rohwedder, S., & Willis, R. J. (2010). Mental Retirement. *The Journal of Economic Perspectives*, 24, 119–138.
- Sackett, P. R., & Laczo, R. M. (2003). Job and work analysis. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), Handbook of psychology: Volume 12, industrial and organizational psychology (pp. 21–37). Hoboken, NJ: John Wiley & Sons, Inc..
- Salthouse, T. A. (2006). Mental exercise and mental aging: Evaluating the validity of the 'Use It or Lose It' hypothesis. *Perspectives on Psychological Science*, 1, 68–87.

- Schaie, K. W. (2005). Developmental influences on adult intelligence: The Seattle longitudinal study. New York, NY: Oxford University Press.
- Schooler, C., Mulatu, M. S., & Oates, G. (2004). Occupational self-direction, intellectual functioning, and self-directed orientation in older workers: Findings and implications for individuals and societies. *American Journal of Sociology*, 110, 161–197.
- Shore, L. M., Coyle-Shapiro, J. A.-M., & Tetrick, L. E. (2012). The employee–organization relationship: Applications for the 21st century. New York, NY: Routledge.
- Shultz, K. S. (2003). Bridge employment: Work after retirement. In G. A. Adams & T. A. Beehr (Eds.), *Retirement: Reasons, processes, and results* (pp. 214–241). New York, NY: Springer Publishing company.
- Shultz, K. S., & Wang, M. (2011). Psychological perspectives on the changing nature of retirement. *American Psychologist*, 66, 170–179.
- Singh, S. (2006). Perceived health among women retirees. *Psychological Studies*, *51*, 166–170.
- Slagter, F. (2007). Knowledge management among the older workforce. *Journal of Knowledge Management*, 11, 82–96.
- Stanton, M. W. (2006). The High Concentration of U.S. Health Care Expenditures. Rockville, MD: Agency for Healthcare Research and Quality. Research in Action, Issue 19. AHRQ Publication No. 06-0060.
- Stawski, R. S., Hershey, D. A., & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions. *International Journal of Aging and Human Development*, 64, 13–32.
- Stevens, R. (2010). Managing human capital: How to use knowledge management to transfer knowledge in today's multigenerational workforce. *International Business Research*, *3*, 77–83.
- Strumpf, E. (2009). Employer-sponsored health insurance for early retirees: Impacts on retirement, health, and health care. *International Journal of Health Care Finance and Economics*, 10, 105–147.
- Super, C. E. (1990). A life-span, life-space approach to career development. In D. Brown (Ed.), Career choice and development (pp. 197–261, 2nd ed.). San Francisco, CA: Jossey-Bass.
- Taylor, M. A., & Schaffer, M. (2013). Planning and adaptation to retirement: The post-retirement environment, change management resources, and need-oriented factors as moderators. In M. Wang (Ed.), The Oxford handbook of retirement (pp. 249–266). New York, NY: Oxford University Press.
- Taylor-Carter, M. A., Cook, K., & Weinberg, C. (1997).Planning and expectations of the retirement experience.Educational Gerontology, 23, 273–288.
- Tsai, S. P., Wendt, J. K., Donnelly, R. P., de Jong, G., & Ahmed, F. S. (2005). Age at retirement and long term survival of an industrial population: Prospective cohort study. *British Medical Journal*, 331, 995–998.

REFERENCES 359

- Tsui, A. S., Pearce, J. L., Porter, L. W., & Tripoli, A. M. (1997).
 Alternative approaches to the employee–organization relationship: Does investment in employees pay off?
 Academy of Management Journal, 40, 1089–1121.
- Tyers, R., & Shi, Q. (2007). Demographic change and policy responses: Implications for the global economy. World Economy, 1, 537–566.
- van Praag, H., Kempermann, G., & Gage, F. H. (2000). Neural consequences of environmental enrichment. *Nature Reviews Neuroscience*, 1, 191–198.
- van Solinge, H., & Henkens, K. (2007). Involuntary retirement: The role of restrictive circumstances, timing, and social embeddedness. The Journals of Gerontology: Psychological Sciences and Social Sciences, 62B, S295–S303.
- van Solinge, H., & Henkens, K. (2008). Adjustment to and satisfaction with retirement: Two of a kind? *Psychology and Aging*, 23, 422–434.
- Vincent, G. K., & Velkoff, V. A. (2010). The next four decades: The older population in the United States: 2010 to 2050. Washington, DC: U.S. Census Bureau (Current Population Reports P25-1138).
- Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92, 455–474.
- Wang, M. (2012). Health, fiscal, and psychological well-being in retirement. In J. Hedge & W. Borman (Eds.), *The Oxford handbook of work and aging* (pp. 570–584). New York, NY: Oxford University Press.
- Wang, M., Adams, G. A., Beehr, T. A., & Shultz, K. S. (2009). Career issues at the end of one's career: Bridge employment and retirement. In S. G. Baugh & S. E. Sullivan (Eds.), Maintaining focus, energy, and options through the life span (pp. 135–162). Charlotte, NC: Information Age Publishing.
- Wang, M., & Chan, D. (2011). Mixture latent Markov modeling: Identifying and predicting unobserved heterogeneity in longitudinal qualitative status change. Organizational Research Methods, 14, 411–431.
- Wang, M., Henkens, K., & van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. American Psychologist, 66, 204–213.
- Wang, M., Liao, H., Zhan, Y., & Shi, J. (2011). Daily customer mistreatment and employee sabotage against customers: Examining emotion and resource perspectives. *Academy of Management Journal*, 54, 312–334.

Wang, M., Liu, S., Liao, H., Gong, Y., Kammeyer-Mueller, J. D., & Shi, J. (2013). Can't get it out of my mind: Employee rumination after customer mistreatment and negative mood in the next morning. *Journal of Applied Psychology*, 98, 989–1004.

- Wang, M., Olson, D., & Shultz, K. (2013). Mid and Late Career Issues: An Integrative Perspective. New York: Psychology Press.
- Wang, M., & Shi, J. (2014). Psychological research on retirement. *Annual Review of Psychology*, 65, 209–233.
- Wang, M., & Shultz, K. (2010). Employee retirement: A review and recommendations for future investigation. *Journal of Management*, 36, 172–206.
- Wang, M., & Zhan, Y. (2012). Employee–organization relationship in older workers. In L. M. Shore, J. A.-M. Coyle-Shapiro, & L. Tetrick (Eds.), The employee–organization relationship: Applications for the 21st century (pp. 427–452). New York, NY: Psychology Press.
- Wang, M., Zhan, Y., Liu, S., & Shultz, K. (2008). Antecedents of bridge employment: A longitudinal investigation. *Journal of Applied Psychology*, 93, 818–830.
- Warr, P. (1997). Age, work, and mental health. In K. W. Schaie & C. Schooler (Eds.), *The impact of work on older adults* (pp. 252–296). New York, NY: Springer.
- Warr, P. (2001). Age and work behaviour: Physical attributes, cognitive abilities, knowledge, personality traits, and motives. *International Review of Industrial and Organizational Psychology*, 16, 1–36.
- Wheaton, F., & Crimmins, E. M. (2013). The demography of aging and retirement. In M. Wang (Ed.), *The Oxford handbook of retirement* (pp. 22–41). New York, NY: Oxford University Press.
- Zappala, S., Depolo, M., Fraccaroli, F., Guglielmi, D., & Sarchielli, G. (2008). Early retirement as withdrawal behavior: Postponing job retirement? Psychological influences on the preference for early or late retirement. Career Development International, 13, 150–167.
- Zhan, Y., Wang, M., Liu, S., & Shultz, K. (2009). Bridge employment and retirees' health: A longitudinal investigation. *Journal of Occupational Health Psychology*, 14, 374–389.
- Zhan, Y., Wang, M., & Yao, X. (2013). Domain specific effects of commitment on bridge employment decisions: The moderating role of economic stress. European Journal of Work and Organizational Psychology, 22, 362–375.