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Published in: Encyclopedia of Geropsychology

DOI: 10.1007/978-981-287-080-3_72-1

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version Publisher's PDF, also known as Version of record

Publication date: 2015

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA): De Jonge, K. M. M., Van Yperen, N. W., & Rietzschel, E. F. (2015). Age and Blended Working. In N. A. Pachana, & N. Thapa (Eds.), *Encyclopedia of Geropsychology* (pp. 1-7). Springer. https://doi.org/10.1007/978-981-287-080-3_72-1

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Age and Blended Working

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Synonyms

Distributed work; Flexwork; Mobile work; Remote work; Telecommuting; Telework; Trust-based working.

Definition

Blended working is the opportunity to blend on-site and off-site working (i.e., working location- and timeindependently), which is enabled by the utilization of information and communication technologies (ICTs) that provide workers with almost constant access to job-relevant information and coworkers.

Introduction

The workforce is aging rapidly, which means that organizations will have to learn how to manage older workers better to avoid labor shortages and a loss of organizational effectiveness (Czaja and Moen 2004). One way to do this, is to rely more on *blended working* practices, that is, the opportunity to blend on-site and off-site working enabled through modern information and communication technology (ICT) facilities (Van Yperen et al. 2014). This chapter summarizes and gives an overview of the opportunities and threats that blended working may have for older workers, and aims to show that blended working practices can be helpful to retain older workers and can keep them satisfied, motivated, and productive in their jobs.

Working from the office, having a business meeting with colleagues in a restaurant, preparing a meeting in the train, online file sharing, and work-related use of tablets and smartphones are the examples of blended working practices. Off-site working is becoming more and more common through the rise of, among others, the internet, e-mail, video calling and chat, and cloud-based data storage. These technologies provide workers with constant and location-independent access to job-relevant information and coworkers (Van Yperen et al. 2014; McLennan 2008). Obviously, not all work types are suited for blended working, as some work can only be done on-site, at specific times, or through face-to-face communication. Blended working is especially suited for knowledge and information work. These work types are becoming increasingly common and mainly revolve around obtaining, analyzing, and sharing knowledge, activities that can mostly be performed online and away from the office (Van Yperen et al. 2014; McLennan 2008).

Another major development in the world of work is that since 2010, the global workforce is aging more rapidly than ever before, as post-World War II cohorts are reaching ages 65 and over (Hedge and Borman 2012). Many older workers are delaying their retirement as a result of the recent economic crisis (Elias et al. 2012) but also with the intention to stay productive and mentally healthy (Lee et al. 2009). For organizations, it is important to retain older workers in order to avoid, or at least lower, the forecasted shortage of 20.8 million EU workers by 2030 (Sharit et al. 2009), and to keep workers with high levels of

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job expertise within the organization (Hedge et al. 2006). This poses new challenges to organizations and their personnel management strategies, since working for income and benefits only does not satisfy the needs of older workers (Hedge et al. 2006). Older workers find it increasingly important to feel intrinsically motivated in their job and put a stronger emphasis on learning and accomplishing new and worthwhile things (Hedge et al. 2006). At the same time, they find it important to experience more flexibility, to have more leisure time and time for nonwork activities, and are less willing to work under high levels of stress (Hedge et al. 2006).

This suggests that implementing blended working may be particularly relevant for older workers. Blended working offers the potential to fulfill older workers' needs and desires by creating a better balance between work and nonwork activities, which can help them to stay satisfied and effective in the job. It allows older workers to (re)design their jobs in a way that suits them best and that appeals to their needs (Hedge and Borman 2012; Hedge et al. 2006; Cutler 2006). Allowing for new and different work opportunities might therefore be a relatively simple and inexpensive method to keep the aging workforce satisfied, motivated, and productive in their job (Hedge et al. 2006).

On the negative side, blended working can pose several threats to older workers' well-being and performance (Van Yperen et al. 2014; McLennan 2008). Possible threats faced by the aging workforce are low levels of experience with the computer technologies required for blended working (Elias et al. 2012), as well as stereotypes about older workers being ill suited for new computer technologies (Sharit et al. 2004). If these threats are not addressed when implementing blended working practices, organizations and their workers will not be able to reap the expected benefits and might even incur unexpected costs. Hence, we will next discuss the opportunities and threats resulting from blended working in more detail, and zoom in on the effects of blended working for the older workforce.

Blended Working: Opportunities

Blended working has two core aspects: increased *discretion* to work from various locations and times and increased *connectedness* to job-relevant information and coworkers via ICTs. Hence, blended working can result in saving time (due to reduced commuting time) and freedom from distractions and interruptions when (partly) working from home (Van Yperen et al. 2014; Cutler 2006). Working connectedly increases (efficiency in) information access and can provide workers with information and feedback that they would not have obtained as easily or quickly otherwise (Mazmanian et al. 2005). Further, working connectedly via online devices enables workers to maintain or even extend their contact with coworkers, and to avoid social impoverishment and isolation when working off-site (Cutler 2006). Blended working, thus, offers unprecedented opportunities for workers to decide when, where, and how to work. Besides these general (potential) benefits, blended working offers some opportunities that are especially relevant for the older worker.

Older Workers and Off-site Working. Research in the US indicates that people working from home tend to be older than the average worker (Lister and Harnish 2011; Bailey and Kurland 2002). Possibly, older workers have gained enough job experience and earned sufficient trust on part of the organization to make frequent off-site working a viable option (Lister and Harnish 2011). Blended working can also be particularly relevant for the older workforce, as this arrangement may help older workers to move more slowly towards retirement, enabling older workers to keep on working longer than when working traditionally at the office (Lister and Harnish 2011).

Balancing Work and Nonwork. Blended working increases flexibility with regard to time and location, and therefore creates the opportunity to find an optimal work-home balance (Van Yperen et al. 2014) (however, see below). This opportunity is especially relevant for older workers, as they

tend to shift their emphasis more towards leisure time and nonwork activities. They often want to continue working, but only if work and nonwork activities can be aligned closer with their needs (Hedge et al. 2006). Blended working can be attractive to older workers, because it enables them to obtain this balance through new work arrangements such as compressed workweeks, reduced workdays, job sharing and part-time working, as well as working from home (Hedge and Borman 2012). The result is that older workers can combine work and nonwork activities in a way that fits their needs (Hedge et al. 2006). This increases the probability that older workers will continue their working careers and retain a positive work attitude (Hedge and Borman 2012).

Freedom from Distractions. Blended working offers workers the discretion to decide on their optimal workplace and schedule. This way, one can more easily avoid working at a workplace that is known to create distraction. This can be especially helpful for older workers, because stressors such as noise or an overcrowded environment distract them more easily (Hedge and Borman 2012). Having the opportunity to work at other places than the office helps them to deal with these stressors from their direct environment (Hedge and Borman 2012), which could result in their continuing to work longer than they would have in a traditional work arrangement.

Less Need to Commute. Blended working lowers the need to commute, as workers can combine working at the office with working from home (Cutler 2006; Thompson and Mayhorn 2012). Travelling to work everyday is thus no longer necessary. This results in efficiency and time savings, and can help to overcome mobility limitations. Older age brings health changes, and workers close to retirement age sometimes face age-related health issues or mobility limitations that can make it difficult to travel to and from the workplace (Thompson and Mayhorn 2012). As the workforce is aging, the number of people facing such issues will increase (Czaja and Moen 2004). The use of blended working practices offers older workers the possibility to manage their health issues in a secure environment (Sharit et al. 2009) and hence increases the opportunity to continue working rather than retire (Czaja and Moen 2004).

It should be noted that, while working *solely* from home can be associated with the risk of professional and social isolation ("out of sight, out of mind") (Bailey and Kurland 2002), blended working refers to the opportunity to *combine* different ways of working (Van Yperen et al. 2014). Thus, it represents a benefit, as workers are enabled to find or create exactly the set of circumstances that work for them.

Caregiving Responsibilities. Given the increasing number of aging or elderly workers, it will become much more common for workers to have to provide elderly care or to take care of a sick or disabled partner or relative (Czaja and Moen 2004). In fact, the majority of workers that need to provide such care are aged 45 years or over (MacDermott 2014). Blended working represents an important opportunity for these workers, similar to the possibilities many young parents are given in order to be able to provide childcare (Hedge and Borman 2012). Blended working practices allow older workers to balance their work and family duties (Bailey and Kurland 2002) and are found to be related to increased work–family balance, lower work–family conflict, greater job satisfaction and productivity, and lower absenteeism (Hedge and Borman 2012).

Blended Working: Threats

Despite their clear potential benefits, blended working practices can also create several challenges or threats. Some of these are not specific to older workers. For example, being able to decide when, where, and how to work may come with the cost of increased complexity, and being constantly connected can result in feelings of external control, resulting from the pressure to be constantly available (Van Yperen et al. 2014). Task ambiguity may also arise, because being continuously connected to coworkers makes it unclear whether, how, and when information will be pushed to one's workplace, while role ambiguity can

arise resulting from the increased work-home interference. Lastly, working from home increases the threat of procrastination and cyberslacking, and increases the likelihood of getting interrupted or distracted by family members (Van Yperen et al. 2014; Mazmanian et al. 2005). While the above issues apply to the working population at large, there are some possible risks that seem particularly relevant for older workers. We will discuss these below, and where possible will address ways to mitigate these risks.

Older Workers and Technology Use. Given that blended working requires extensive use of ICTs, it is essential that workers have the skills and confidence to use these technologies. Unfortunately, older people sometimes lack computer experience as computers were not yet available during their formal education (Elias et al. 2012). Because of this, older workers report a lower use of technology, more anxiety to start using these technologies, and are more likely to have a negative attitude towards technologies relative to younger workers (Elias et al. 2012). Whereas positive attitudes and successful experiences would result in better implementation of these technologies, anxiety often results in a negative attitude towards these technologies, and lower intentions to use these technologies (Elias et al. 2012). Research indicates that within cohorts of age 50 onwards, people are less likely to own a computer, or to use the internet or computers in general (Cutler 2006). Of those aged 65 years and over, only about 40 % uses the internet (Charness et al. 2010).

Older workers need more time to perform a computer-interactive task and make more errors while doing so relative to younger workers (Sharit et al. 2004), but this disadvantage mainly arises due to a lack of experience with these technologies rather than from chronological age itself (Hedge et al. 2006). As an increasing amount of future older workers will already have built up experience with computer technologies, this difference will probably diminish over time (Thompson and Mayhorn 2012). However, as older workers often face perceptual, physical, and cognitive declines, it may remain difficult for them to adopt rapidly changing technological innovations. Because of this, a lag in technological knowledge may continue to exist (Thompson and Mayhorn 2012).

Stereotypes: Older Workers and Technology. Problematically, the low rate of technology use among older workers is reinforced by negative beliefs and stereotypes about them, and older people may be less likely to use new technologies because of the social expectation that their age group is less willing to do so (Cutler 2006). Stereotypes about older workers as well as age biases against older workers are often present in the workplace, and can negatively affect both the individual older worker and the organization in general (Hedge and Borman 2012; Ng and Feldman 2012). Age biases can result in age discrimination when implicit biases affect decision making and hence the opportunities given to older workers with regard to employment, promotions, or training opportunities (Hedge et al. 2006) (also see below).

Typical stereotypes about older workers and technology use (such as the belief that these workers lack the right technological experience and newest technological skills, are afraid of new technologies, and are less willing and able to accept and adapt to new technologies (Hedge and Borman 2012; Ng and Feldman 2012)) are already applied to individuals of age 40 (Elias et al. 2012). Also, older workers are thought to need more time to learn and to be slower and more forgetful. Because of this, training programs are assumed to be less effective and more costly for older workers, which often results in denying them the right training opportunities (Hedge and Borman 2012). As older people in fact often do have less experience with new technologies, denying them training opportunities can result in their avoiding the use of new technologies altogether. The result is a self-fulfilling prophecy and a risk of stereotype threat: Their skills and knowledge in the job become outdated, which reinforces the stereotypes about older workers (Hedge et al. 2006).

Training Older Workers. The (possible) lack of computer experience highlights the importance of providing appropriate training opportunities for older workers, in order for them to become more familiar with computer technologies, to overcome anxiety, and accrue positive experiences with technology. Unfortunately, organizations are often resistant to provide older workers with training opportunities.

This is not only because of the above-mentioned negative beliefs and stereotypes about older workers and technology use (Sharit et al. 2009; Thompson and Mayhorn 2012), but also because older workers provide fewer years in which organizations can reap the benefits of their training investments. In fact, the shorter future tenure is irrelevant, because training investments are likely to pay off within a few years. Hence, providing training to older workers who do not retire within 2–3 years or so, prevents organizations from the loss of expertise when losing these workers. As older workers are known to show low rates of absenteeism and turnover in the job, and high levels of organizational citizenship behavior, it is cost effective for organizations to give older workers the appropriate training opportunities and to retain them in the organization (Czaja and Moen 2004; Ng and Feldman 2008).

Although research indicates that older workers are somewhat resistant to engage in training activities (Ng and Feldman 2012), this is not the case for technological training (Ng and Feldman 2012). In fact, older workers are very willing to learn the technological knowledge and skills required for their job, and their experience of success when using new technologies results in favorable attitudes towards it (Czaja and Moen 2004; Cutler 2006; Ng and Feldman 2012). To enable these positive outcomes, it is important to give the right type of training (Cutler 2006) and to include familiar tasks in the training program (Czaja and Moen 2004). Possible physical and cognitive declines need to be taken into account, and the training program must be aligned with the needs of older workers (Thompson and Mayhorn 2012; Sharit and Czaja 2012). When older workers have successful experiences with computer technologies, they experience these technologies as reducing the effort and time required to fulfill job tasks and as increasing their job performance, enabling them to keep working effectively and productive (Mitzner et al. 2010).

Work–Home Interference. As explained above, blended working has the potential to meet older workers' desire for a better work–home balance, because it allows them the discretion to schedule their work activities and work location as they see fit (Van Yperen et al. 2014; Hedge et al. 2006). Paradoxically, however, blended working practices also introduce the risk of increased work–home interference, as workers may feel an expectation to be constantly available and may experience a blurring of work and private life; this can put a strain on workers themselves and on their relations with partners, family members, and friends (Van Yperen et al. 2014; Mazmanian et al. 2005). This may be particularly problematic for older workers. First, older workers have a stronger need to adequately balance work and private life (and tend to put a stronger emphasis on leisure time) (Hedge et al. 2006). Secondly, older workers are more likely to face health issues, both regarding their own health (which may mean that they need more opportunities to recover from work) (Thompson and Mayhorn 2012) and the health of their partner or other family members (which means that they may need more time to fulfill caring duties) (Czaja and Moen 2004; Hedge and Borman 2012).

Successful implementation of blended working practices among an aging working population requires that these issues are explicitly addressed. The perceived pressure resulting from constant connectedness is found to be contingent on the presence or absence of a shared notion that different workers might use ICTs differently (Mazmanian et al. 2005). Thus, it is important that older workers are not simply trained and encouraged to use new ICTs but also that they are encouraged to use them in the way that best fits their personal situation.

Integration and Practical Implications

Blended working practices can fulfill important psychological needs, some of which are particularly salient among older workers (such as the need for a distraction-free environment or a better work–home balance), but also introduces new pitfalls – some of which, again, may be particularly relevant to older workers (such as intensive use of new technologies and having to deal with negative stereotypes). If this

brief review shows anything, it is that a *contingency approach* (Bailey and Kurland 2002) is essential when it comes to the implementation of blended working practices. Older workers' job performance can increase when the work environment is changed so as to fit more closely with their needs. They prefer a work environment that does not entail many changes, that allows for a flexible approach in conducting tasks, and in which they feel supported and receive the appropriate training (Hedge and Borman 2012). Taking workers' age, needs, and motives into account will help determine how blended working can best be put into practice for each individual worker, and can give insight in what aspects would require (additional) training opportunities (Van Yperen et al. 2014).

However, as noted, negative age stereotypes often result in excluding older workers from learning and training opportunities and lower their comfort to use these technologies. It should be stressed that such stereotypes are counterproductive and inconsistent with research evidence (Thompson and Mayhorn 2012; Ng and Feldman 2012). Organizations should become aware of these (implicit) biases and start changing their knowledge about older workers in accordance with what has been shown in the literature (MacDermott 2014; Ng and Feldman 2012).

The aging workforce is a fact, not an option. Therefore, the challenge is to implement blended working in a way that matches older workers' needs and motives, while minimizing the associated risks. While technological training can be particularly helpful in this regard, it is not simply a matter of teaching older workers new tricks. Coworkers and supervisors will need to change along with their older colleagues – not just for the benefit of their colleagues and the organization but also with an eye to their own future. After all, the world of work will continue to change, and every worker and organization should prepare for these changes as well as they can.

Cross-References

- ► Age Stereotypes in the Workplace
- Age-Related Changes in Abilities
- ► Job Crafting in Aging Employees
- > Organizational Strategies for Attracting, Utilizing, and Retaining Older Workers
- ► Role of Age in Workplace Mentoring
- ► Technology and Older Workers
- ► Training at Work and Aging
- ► Work Design and Aging

References

- Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior, 23*, 383–400.
- Charness, N., Fox, M. C., & Mitchum, A. L. (2010). Lifespan cognition and information technology. In K. Fingerman, C. Berg, T. Antonnuci, & J. Smith (Eds.), *Handbook of lifespan psychology*. New York: Springer.
- Cutler, S. J. (2006). Technological change and aging. In R. H. Binstock & L. K. Beorge (Eds.), *Handbook of aging and the social sciences* (6th ed., pp. 257–276). Burlington, MA: Academic Press.
- Czaja, S. J., & Moen, P. (2004). Technology and employment. In R. W. Pew & S. B. Van Hemel (Eds.), *Technology and adaptive aging* (pp. 150–178). Washington, DC: National Research Council.

- Elias, S. M., Smith, W. L., & Barney, C. E. (2012). Age as a moderator of attitude towards technology in the workplace: Work motivation and overall job satisfaction. *Behaviour and Information Technology*, *31*, 453–467.
- Hedge, J. W., & Borman, W. C. (2012). *Work and aging*. In S. W. J. Koslowski (Ed.), The Oxford handbook of organizational psychology (Vol. 2, pp. 1245–1283). New York, NY: Oxford University Press, Inc.
- Hedge, J. W., Borman, W. C., & Lammlein, S. E. (2006). *Organizational strategies for attracting, utilizing, and retaining older workers*. Washington, DC: American Psychological Association.
- Lee, C. C., Czaja, S. J., & Sharit, J. (2009). Training older workers for technology-based employment. *Educational Gerontology*, 35, 15–31.
- Lister, K. & Harnish, T. (2011). The state of telework in the U.S.: How individuals, Business, and Government Benefit. San Diego, CA: Telework Research Network.
- MacDermott, T. (2014). Older workers and extended workforce participation: Moving beyond the "barriers to work" approach. *International Journal of Discrimination and the Law, 14*, 83–98.
- Mazmanian, M., Orlikowski, W. J., & Yates, J. (2005). Crackberries: The social implications of ubiquitous wireless email devices. In C. Sorenson, K. Yoo, K. Lyytinen, & L. I. DeGross (Eds.), *Designing ubiquitous information environments: Socio-technical issues and challenges* (pp. 337–344). New York: Springer.
- McLennan, K. J. (2008). *The virtual world of work: How to gain competitive advantage through the virtual workplace*. Charlotte: Information Age Publishing.
- Mitzner, T. L., Boron, J. B., Fausset, C. B., Adams, A. E., Charness, N., Czaja, S. J., Dijkstra, K., Fisk, A. D., Rogers, W. A., & Sharit, J. (2010). Older adults talk technology: Technology usage and attitudes. *Computers in Human Behaviour, 26*, 1710–1721.
- Ng, T. W. H., & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance. *The Journal of Applied Psychology*, *93*, 392–423.
- Ng, T. W. H., & Feldman, D. C. (2012). Evaluating six common stereotypes about older workers with meta-analytical data. *Personnel Psychology*, 65, 821–858.
- Sharit, J., & Czaja, S. J. (2012). *Job design and redesign for older workers*. In J. W. Hedge & W. C. Borman (Eds.), The Oxford handbook of work and aging. New York, NY: Oxford University Press.
- Sharit, J., Czaja, S. J., Hernandez, M., Yang, Y., Perdomo, D., Lewis, J. E., Lee, C. C., & Nair, S. (2004). An evaluation of performance by older persons on a simulated telecommuting task. *The Journals of Gerontology: Psychological Sciences*, 59, 305–316.
- Sharit, J., Czaja, S. J., Hernandez, M. A., & Nair, S. N. (2009). The employability of older workers as teleworkers: An appraisal of issues and an empirical study. *Human Factors and Ergonomics in Manufacturing*, 19, 457–477.
- Thompson, L. F., & Mayhorn, C. B. (2012). *Aging workers and technology*. In J. W. Hedge & W. C. Borman (Eds.), Oxford handbook of work and aging (pp. 341–361). New York, NY: Oxford University Press.
- Van Yperen, N. W., Rietzschel, E. F., & De Jonge, K. M. M. (2014). Blended working: For whom it may (not) work. *PLoS One*, *9*, e102921.