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Telework: Outcomes and Facilitators for Employees

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Abstract

This chapter reviews current research on telework. We first examine the literature on telework and job performance, job attitudes, and professional isolation, before reviewing the outcomes of telework on employee well-being as characterized by stress and work-life balance. We then turn our attention to factors that contribute to a successful telework experience: characteristics of the job, characteristics of the employee, and characteristics of the employee's manager(s). We also identify the key role of technology support in influencing many of the established outcomes of and contributors to telework. Finally, we discuss the gaps in our knowledge of telework's repercussions for employees and organizations. We conclude by identifying the implications of what we do know for theory and practice. To maximize positive outcomes, we recommend evidence-based guidelines for organizations with regard to 1) selecting and preparing employees for telework, and 2) managing their use of this flexible work practice.

Keywords: telework, homeworking, telecommuting, flexible working, remote working, work-life balance, professional isolation

Flexible work practices refer to mutual arrangements made between employers and employees that vary the hours and location of work, often with the dual aim of improving employees' work-life balance and meeting the organization's needs (Thompson, Payne & Taylor, 2015). Telework is one such arrangement, which involves working away from the office for a portion of the work week while keeping in contact via information and communications technology (ICT) (Allen, Golden &

Shockley, 2015). It can be used simultaneously with other flexible work arrangements, such as flexible hours and part-time work. Telework is usually conducted from a location of the employee's choosing (e.g., home) and can thus be differentiated from remote work, which more often takes place at different business units or while travelling for business purposes.

One acknowledged difficulty in drawing any firm conclusions about the impact of telework is that studies of this work arrangement appear in numerous disciplinary literatures: management, human resource management, industrial relations, psychology, family studies, sociology, information systems, logistics, and operations, for example. For the purposes of this chapter, which is attempting to identify individual-level factors that facilitate or hinder the telework experience, we will be drawing upon each of these literatures but focusing primarily upon those relevant to interpersonal processes rather than organization-level systems.

19.1 Outcomes of Telework

Outcomes of telework manifest themselves in a number of different ways. We will first examine work-related outcomes in the form of job performance, job attitudes, and professional isolation. Following this, we will review the effects of telework on well-being, in the form of stress and work-life balance.

19.1.1 Individual Performance

Numerous studies support the positive association between telework and increased productivity (Allen et al., 2015; Bélanger, 1999; Bloom et al., 2014; Crandall & Gao, 2005). For example, results from an experiment conducted with 252 call-centre employees over 9 months showed a 13% increase in job performance of the teleworkers compared to the office-based control group (Bloom et al., 2014). Some researchers have questioned the relationship between telework and

productivity, as performance is often based on self-report measures rather than on more objective evidence (Bailey & Kurland, 2002). However, there is considerable empirical evidence that telework leads to not only greater self-reported productivity but also greater supervisor-rated performance (Kossek, Lautsch, & Eaton, 2006; Telework Exchange, 2008). For instance, a recent study using field data from 323 employees and 143 matched supervisors across a variety of organizations found that telework was positively associated with task performance (Gajendran, Harrison, & Delaney-Klinger, 2015).

The positive relationship between telework and productivity can be explained by multiple factors. First, employees working from home may simply put more hours into work: they have more time than office-based workers (as they do not travel to the office) and choose to use this extra time to work, or they may feel the need to reciprocate the flexibility provided by the organization by longer hours and/or harder work (Baruch, 2000; Gajendran & Harrison, 2007; Kelliher & Anderson, 2010). Empirical studies have frequently found that teleworkers put in longer hours when working at home (Kelliher & Anderson, 2010; Mariani, 2000; Peters & van der Lippe, 2007). For instance, in a qualitative study of 62 teleworkers in the UK, including some from a local government agency, 48% of participants reported having increased their working hours since having changed to telework from an office-based working arrangement (Baruch, 2000).

Second, as teleworkers lack the distractions of the office and have less involvement in organizational politics (Fonner & Roloff, 2010), they may be able to focus on their job tasks more effectively than at the office. For instance, in a qualitative study of UK professionals, employees teleworking for part of the week noted putting more effort due to the absence of distractions from the office; writing

documents and analysing large volumes of data were identified as tasks that benefited the most from being performed at home rather than at the office (Kelliher & Anderson, 2010). Third, having a relatively high level of discretion over the conditions under which the work is conducted (for example, choosing to work in the hours when one is more efficient) could lead to a gain in productivity when working from home rather that in a traditional office setting (Harpaz, 2002). Lastly, the perceived increase in autonomy when working from home (Baruch & Nicholson, 1997) could help employees to meet job-related goals and respond to job demands (Gajendran et al., 2015). The practice of telework may provide employees the flexibility to better manage the demands of their jobs and private lives and become more productive (Baruch, 2000).

However, telework may negatively affect individual performance. As explained later in this chapter, there is extensive empirical evidence that telework may lead to social and professional isolation (Baruch & Nicholson, 1997). Unsurprisingly, extensive use of telework may imply less face-to-face interactions with colleagues, increasing the sense of feeling out of touch with others in the workplace. Professional isolation among teleworkers may negatively affect job performance (Golden, Veiga, & Dino, 2008). The main argument underlying this statement is that professionally isolated teleworkers are less confident in their abilities and knowledge to perform their work; they have less opportunity to interact with co-workers and acquire and accurately interpret and use information that may be essential to performing the job well. Supporting this argument, Golden et al.'s (2008) quantitative study of a matched sample of 261 professional-level teleworkers and their managers revealed that the intensity of telework accentuates the negative impact of professional isolation on job performance. Results also revealed that more face-to-face interactions and access to

communication-enhancing technologies (such as audio/video conferencing, e-mail/web meeting software) are likely to decrease professional isolation's negative impact on job performance. Echoing these results, a study of 89 employees teleworking an average of 27.4 hours a week found a positive relationship between the richness of the communication media used and teleworkers' performance and job satisfaction (Turetken et al., 2011). Teleworkers communicating more via Skype video calls, for example, reported higher levels of job satisfaction and performance than those using messaging or e-mail. These text-based forms of communication are considered the least 'rich media' as they are further removed from in-person, face-to-face communication.

In addition, telework may also influence *perceptions* of individual performance. Telework presents managers with the difficulty associated with monitoring workers who are not working from the office. Felstead, Jewson and Walters (2002) attribute this difficulty to 'visibility' and 'presence'. Visibility allows managers to observe workers' behavior and performance first-hand, while presence facilitates worker interactions and relationships with their co-workers. When supervising remote workers, managers must rely on output-related metrics and alternative monitoring techniques, often utilizing technology as well as trust, to both evaluate and manage performance quality and quantity (Felstead et al., 2002).

Working from home has also been negatively associated with absenteeism and turnover (Gibson et al., 2002). Given the greater flexibility that employees working from home usually have compared to office-based employees, teleworkers may be able to accommodate demands from private life (for example, taking an elderly parent to a hospital appointment) without needing to request a day off. At the same time, as discussed earlier, teleworkers may believe that it would be difficult finding similar

flexible conditions in other organizations (Kelliher & Anderson, 2010) and choose to stay working for their employer.

19.1.2 Team-Related Performance

One of the main reasons managers and co-workers have been opposed to the implementation of telework is the perception that if one or more members regularly work away from the office it would negatively impact team performance (Lupton & Haynes, 2000). There is evidence which suggests this may be the case, that telework may negatively affect teleworkers' relationship with co-workers, co-workers' job satisfaction, knowledge transfer and, ultimately, team performance. However, factors such as intensity of telework (i.e., the amount of time teleworkers work away from the office), communications with colleagues and task interdependence may help to reduce or eliminate the potential negative effects of telework on team functioning.

Concerns that telework may harm the quality of relationship of teleworkers with their colleagues have been reported in a number of studies (Igbaria & Guimares, 1999; Nardi & Whittaker, 2002; Reinsch, 1997). The diminished frequency of face-to-face interactions associated with telework may reduce the richness of employees' connection with his/her peers. Co-workers may perceive spatial distance as psychological distance (out of sight, out of mind). As the contributions of teleworkers may not be as visible as those of employees working at the office, co-workers may perceive that teleworkers contribute less to the shared team objectives (Golden, 2006a). For individuals who work mostly from home, research results indicate that telework may be linked to decreased co-worker relationship quality. In a large-scale study of professional employees in a telecommunications company, where the extent of telework ranged from 2 hours per week to over 35 hours per week, greater participation in telework was significantly associated with lower quality relationships

with both supervisors and co-workers (Golden, 2006a). Similarly, a meta-analysis of telework research found that 'high-intensity' telework, defined as working at home more than 2.5 days per week, had a negative relationship with co-worker relationship quality; however, this effect was not found with 'low-intensity' telework (Gajendran & Harrison, 2007). In line with these findings, several empirical studies suggest that telework is unlikely to have any negative effect on teleworkers' relationships with colleagues when they work at home for only part of their working week. For instance, a study of over 1,000 workers in the Netherlands demonstrated that employee participation in non-exclusive telework arrangements had no effect on social and communicative behaviour toward co-workers and efforts to contribute to the social atmosphere in the team, e.g., keeping in close touch with team members, helping to organise social activities, and discussing non-work issues with colleagues (ten Brummelhuis, Haar, & van der Lippe, 2010).

Results from past empirical research also suggest that the number of teleworkers in an organization is negatively associated with co-worker satisfaction (Golden, 2007). This relationship is moderated by the telework intensity, the extent of face-to-face interactions, and job autonomy. For example, Golden's (2007) study of 240 professionals at a high technology firm revealed that the more time employees work from home, the more negative the impact of teleworker prevalence on co-worker satisfaction. Similarly, the more face-to-face interactions and job autonomy, the less that teleworker prevalence reduces co-worker satisfaction. This dissatisfaction in turn predicted higher turnover intentions for office-based co-workers.

The number of teleworkers in an organization can also have a differential impact on relationship quality among teleworkers and office workers. For instance, a qualitative case study of a local government council in Britain found that while full-

time teleworkers experienced diminishing levels of support from office-based colleagues after they began working from home, support from other teleworkers grew (Collins, Hislop & Cartwright, 2016). The same study found that office workers identified other office workers as their main sources of workplace social support (Collins et al., 2016).

Co-worker relationships are important as they have significant consequences for both teleworkers and office-based staff. A study of high-intensity teleworkers (working away from the office at least 3 business days per week) found that teleworkers liking their peers was positively related to teleworkers' satisfaction with their informal communication with co-workers, and with their organizational commitment and job satisfaction (Fay & Kline, 2011). This study found that social support provided by co-workers predicts high-intensity teleworkers' levels of organizational commitment and identification with the employing organization. Another study, investigating 226 employees who worked at home for an average of half the working week, found that a trusting relationship with colleagues and supervisors and an interpersonal bond with co-workers predicted increased knowledge sharing with co-workers, and these links were strengthened by a greater number of face-to-face interactions (Golden & Raghuram, 2010).

Regarding knowledge sharing, it has been argued that telework can jeopardize an organization's knowledge base due to its likely detrimental effects on knowledge transfer between teleworkers and office-based workers. There is some evidence that telework may negatively affect knowledge transfer in organizations (Taskin & Bridoux, 2010). This negative effect is the result of telework having a negative impact on components of organizational socialization (i.e., shared mental schemes, quality of relationships) that are key enablers of knowledge transfer. Past research has found

that employees working remotely while relying on technology to communicate may experience lower levels of communication, information sharing, discussion quality and communications richness than those employees who mainly interact face to face (Lowry, Roberts, Romano Jr, Cheney, & Hightower, 2006). In contrast, there is evidence indicating that even though working from home for at least 50% of the time leads to less frequency of information exchange, it does not necessarily mean that it will affect the quality of information exchange, and fewer interactions with others may even prove to be beneficial (as interactions with others may disrupt work) (Fonner & Roloff, 2010). A recent study examining the performance of teams in new product development projects in telecommunications has indicated that telework has a positive effect on team performance via facilitating knowledge sharing, cross-functional cooperation and inter-organizational involvement (Coenen & Kok, 2014). This study found that the ease and speed of communications via telework supports knowledge transfer and collaboration in groups whose members are geographically dispersed, as long as there are some basic face-to-face interactions to create and maintain trust and good interpersonal relationships. It can therefore be tentatively concluded that telework does not necessarily have a detrimental effect on knowledge transfer. This finding notwithstanding, other studies do occasionally report on teleworker perceptions that reduced communication with colleagues results in reduced information acquisition. For example, a teleworker in Beauregard, Basile and Canonico's (2013, p. 58) qualitative study of public sector employees is quoted as saying:

> *Again it goes back to the fact that you are, potentially, away from hearing and subconscious learning. Lifting your head up and asking a question.*

Related to communications and knowledge sharing, task interdependence is an important consideration when analyzing the impact of telework on teamwork. Past research suggests that higher levels of task interdependence are associated with lower productivity of teams with teleworkers (Turetken et al., 2011). As task interdependence requires a higher degree of information exchange and interaction between teleworkers and their colleagues, greater interdependence may hinder collaboration and performance due to limited range of interactions associated with telework (Bell & Kozlowski, 2002; Bordia, 1997). For less interdependent tasks (e.g., sequential or pooled tasks), where performance is the sum of individual members' performance, telework is unlikely to produce any negative outcomes for teamwork as team members do not need much direct interaction with each other (Maynard & Gilson, 2014). Empirical evidence also indicates that when workers with lower number of face-to-face interactions make themselves proactively available to their colleagues, team performance can be enhanced (Corwin, Lawrence, & Frost, 2001).

Whether telework is seen as the norm or as an exception in an organization may help to explain its effects on team performance. Some scholars speculate that in organizations that view telework as an exception, teleworkers may feel responsible for minimising any negative impact of not being physically present at the office (for instance, by working longer hours to indicate their commitment to their office-based co-workers) (Gajendran et al., 2015). In contrast, in organizations where telework is the norm, office-based workers may have adapted their processes to accommodate teleworkers (for example, by not starting team meetings earlier than 10:00 to allow employees working from home to travel to the office) in order to maximise the benefits for telework, which, ultimately, would lead to an increase in team

performance and teleworkers are more likely to feel like legitimate, valued members of the team.

19.1.3 Job Attitudes

Job satisfaction is one of the most commonly reported consequences of telework arrangements (Manochehri & Pinkerton, 2003; Stephens & Szajna, 1998; Tremblay, 2002). The main explanatory factor for the link between telework and job satisfaction is that having the flexibility to work away from the office (and being able to exercise discretion over where, when and how to work) may lead to an increased sense of job control and autonomy (Kelliher & Anderson, 2008; Tietze & Musson, 2005). This autonomy, in turn, is positively associated with job satisfaction (Gajendran & Harrison, 2007). However, empirical evidence regarding the impact of telework on job satisfaction remains mixed.

Past research has suggested that there is an inverted U-shaped relationship between the extent of telework and job satisfaction, with increases in job satisfaction dropping off as telework becomes more extensive (Golden, 2006a; Golden & Veiga, 2005). When the extent of telework is small (teleworking up to 12 hours per week), teleworkers can minimize negative effects from telework (such as isolation and frustration) and benefit from the perception of increased autonomy and report higher job satisfaction (Feldman & Gainey, 1998). However, extensive use of telework intensifies reliance on technology to communicate with others at the workplace, and also increases the likelihood of isolation and frustration, which may counteract the benefits of telework and reduce job satisfaction (Golden, 2006a). In contrast, a study with a sample of 192 participants (89 teleworkers and 103 office-based workers) found that employees extensively using telework (those who worked at home three days or more per week) remained more satisfied than office-based employees,

questioning assumptions regarding the value of a need for frequent face-to-face interactions in the workplace (Fonner & Roloff, 2010). This study helps to explain that satisfaction can be associated with working away from the stress of a traditional office setting; stress caused by meetings, interruptions and awareness of organizational politics.

Work-life conflict has also been studied as a mediator in the relationship between telework and job satisfaction. Results from this research have not been entirely consistent. Some researchers have found that telework was associated with a reduction of work-life conflict, leading to an increase in job satisfaction (Fonner & Roloff, 2010: Gajendran & Harrison, 2007). They also found the highest reduction in work-life conflict among employees who used telework more extensively. In contrast, other scholars argue that telework may increase work-life conflict as it may blur the lines between the work and non-work domains, making boundary violations more likely and, as a result, create conflict (Anderson & Kelliher, 2009).

The perception of greater autonomy among teleworkers is also positively related to greater commitment to the employer. Increased organizational commitment may reflect teleworkers' desire not to lose their working arrangement and its associated benefits; employees working flexibly and experiencing higher levels of autonomy have reported beliefs that it would be difficult to find comparable working arrangements in another organization (Anderson & Kelliher, 2009; Kelliher & Anderson, 2010). This link between telework and organizational commitment has been echoed in other studies, which have found that teleworkers are less likely to express a desire to leave their employer or, in some cases, to change jobs within the same organization (Glass & Riley, 1998; Golden, 2006b; Igbaria & Guimares, 1999; Kossek et al., 2006). In at least one case, however, this relationship has been found to

be contingent upon the degree of telework performed. There is evidence of a positive relationship between telework and organizational commitment for moderate use of telework, but no significant effect for intensive use of telework (Hunton & Norman, 2010). In contrast, there is some research that suggests that telework is associated with lower organizational commitment, as teleworkers may become more committed to work from home than to their organization and have a more transactional view of the relationship with their employer (Tietze & Nadin, 2011).

Past research on the impact of telework on employee engagement, another important job-related attitude, is contradictory. On one hand, empirical research has suggested that telework may have a positive relationship with employee engagement. For instance, Anderson and Kelliher (2009) found that flexible workers (who include teleworkers) were likely to be more engaged than non-flexible workers, as they reported higher levels of organizational commitment, job satisfaction and organizational citizenship behaviour than non-flexible workers. Having a choice over their working pattern and feeling the support and trust of their employer, who allowed their individual needs to be accommodated, are some of the factors that explained the referred positive outcomes of flexible working.

On the other hand, there is contrasting evidence that shows a negative relationship between telework and employee engagement, mediated by increased isolation (Arora, 2012; Davis & Cates, 2013; Sardeshmukh, Sharma, & Golden, 2012). An explanation for this finding is that social relationships drive human motivation and if the social need is thwarted, perceptions of isolation will emerge, which can have a negative influence on engagement among teleworkers (Davis & Cates, 2013). This relationship can be contingent upon the frequency of telework. Frequent use of telework has been associated with high level of isolation, which in

turn, negatively impacts work engagement (Arora, 2012). Furthermore, a US survey of 417 teleworkers has found that telework is associated with lower employee engagement mediated by job demands and resources (Sardeshmukh et al., 2012). This study revealed that teleworkers may experience greater role ambiguity (job demand) and reduced social support and feedback (job resources) and, as a result, report lower levels of engagement.

A final note on telework's effect on job attitudes relates to the importance of a good fit between managers and subordinates. A quantitative study of over 11,000 workers and managers found that compared to colleagues whose managers were office-based, subordinates with telework managers reported lower levels of job satisfaction and increased intentions to leave the organization (Golden, 2011). However, telework subordinates whose managers were also teleworkers experienced more positive outcomes than teleworkers with office-based managers: more feedback, greater opportunities for professional development, higher job satisfaction, and lower turnover intentions. Based on these results, it seems that individuals with similar working arrangements may have an advantage when it comes to forging a successful working relationship.

19.1.4 Isolation

Closely linked to the impact of telework on co-worker relationships are telework outcomes that are associated with isolation. The conduct of work activities in a space that is distant from the office and one's co-workers can lead to physical, social and/or professional isolation among co-workers. Physical isolation refers to an employee conducting work activities in an environment that is separate from the work environment of their colleagues (Bartel, Wrzesniewski, & Wiesenfeld, 2012). Social isolation refers to an individual's feelings of lack of inclusion or connectedness within

their work environment (Bentley et al., 2016). Last, professional isolation is linked to reduced development opportunities offered to employees; employees may be concerned that telework limits their opportunities for networking, learning and/or informal mentoring (Cooper & Kurland, 2002). However, it is important to note that isolation is not a phenomenon specific to telework; employees can experience isolation even when working in the same physical location as their colleagues (Rokach, 1997; Smith, 1998). Conversely, some employees experience sustained connections with colleagues despite regular absences from the workplace (Duxbury & Neufeld, 1999; Vega & Brennan, 2000; Venkatesh & Speier, 2000). In addition, concerns about isolation and telework may actually exceed the degree of isolation experienced. In a study of 394 teleworkers, more than half indicated that prior to teleworking they were concerned about the loss of professional (53.5%) or social (54%) interactions; however, far fewer indicated that they actually experienced the loss of professional (24.2%) or social (32.7%) interactions after initiating telework (Maruyama & Tietze, 2012). However, despite the discrepancy between perceptions and experiences of isolation, research has identified some important outcomes associated with isolation resulting from telework.

In many organizations, teleworkers have concerns about the impact of isolation on their career prospects, fearing that they are not only 'out of sight', but also 'out of mind' when it comes time for managers to allocate key assignments or nominate candidates for promotion (Baruch, 2001; Gibson et al., 2002; Khalifa & Davidson, 2000). A qualitative study of 76 remote workers at a Canadian subsidiary of a multi-national organization found that workers feared that despite strong performance and higher productivity levels due to their ability to work from home, they would be forgotten in terms of career advancement due to their lack of visibility

in the office (Richardson & Kelliher, 2015). Research has also found that these fears may not be unfounded (McCloskey & Igbaria, 2003). In Golden et al.'s (2008) study of 261 teleworkers and their managers, self-reported professional isolation among teleworkers was negatively related to their job performance, as rated by their managers. This effect was particularly pronounced for teleworkers who worked extensively from home and engaged in limited amounts of face-to-face interaction with colleagues and managers. Further research examines the contributing factors to concerns about telework and career advancement. A study of 394 British Telecom teleworkers observed that lack of professional interaction was an important outcome associated with telework that led to concerns about the ability to advance in one's career (Maruyama & Tietze, 2012). In particular, lack of professional interaction reduced employees' opportunities to share knowledge, learn from their colleagues and build their professional networks.

Research has sought to explain the linkage between telework, isolation and employee attachment to or identification with their organization. For example, work by Bartel et al. (2012) has linked experiences of isolation with employees' perceived respect from their colleagues and organizational identification. Conducting surveys with participants in alternative work programs across two companies, Bartel and colleagues found that at higher levels of physical isolation, workers perceived that they were regarded with lower levels of respect by their colleagues. This, in turn, reduced their own identification with the organization. Belle, Burley and Long's (2015) qualitative study of high-intensity teleworkers further explored factors contributing to employees' 'sense of belonging' in the workplace. The research found three contributing factors to teleworker perceptions of belonging: the sense that they had a choice in their telework arrangement; the sense that they were able to negotiate

the specifics of their telework arrangement; and having strong knowledge of how the organization operates prior to engaging in telework. These are important considerations for managers of teleworkers, because organizational identification and attachment have been associated with positive organizational outcomes such as increased individual performance (He & Brown, 2013).

19.1.5 Well-Being: Work-Life Balance

One of the most frequently reported outcomes of telework is that it affords individuals with more opportunities to manage the demands of their work and non-work roles, reducing experiences of work-to-life conflict (Gajendran & Harrison, 2007). For instance, a survey of 454 professional-level employees who divided their work time between an office and home found that the more time per week individuals worked at home, the lower their work-to-life conflict (Golden, Veiga, & Simsek, 2006). This effect was even more pronounced for employees reporting higher levels of job autonomy and scheduling flexibility, which presumably allowed them to arrange their work tasks in such a way as to accommodate their family or other non-work commitments. The lower levels of work-to-life conflict experienced by teleworkers have been found to predict, in turn, higher job satisfaction, perceptions of performance, reduced intentions to leave the organization, and decreased levels of job-related stress for teleworkers (Fonner & Roloff, 2010; Gajendran & Harrison, 2007; Vega, Anderson, & Kaplan, 2015; Wheatley, 2012).

Qualitative research helps to explain why telework has such beneficial effects on work-to-life conflict. Telework saves employees time, because it reduces or eliminates commuting time that cannot be used for work, family, or leisure activities (Hill, Ferris, & Martinson, 2003). It also allows employees to determine the timing of their task completion; for instance, interviews with 47 dual-earner couples with

children found that many of the participants chose to work at times when their children would be busy with other activities or already asleep for the evening (Haddock et al., 2006). By doing so, participants could complete greater amounts of work without having job-related obligations interfere with their family time. This has knock-on effects on family relationships. In a qualitative study of 62 UK teleworkers, including some employed by a local government, participants reported that since they began working at home, they had noticed improvements in their relationships with family members (Baruch, 2000). In addition, telework also allows employees to be more flexible in meeting the needs of their employers. A qualitative study of 11 teleworkers in the UK found that the ability to telework was helpful in balancing their non-work obligations as well as giving them greater flexibility to manage work demands, such as evening conference calls (Grant, Wallace, & Spurgeon, 2013).

These beneficial effects on work-to-life conflict notwithstanding, telework does not appear to be a quick ticket to better work-life balance for all employees. Because work is taking place in the same physical space allocated to an individual's personal or family life, it can sometimes be difficult to erect and maintain clear boundaries between work and non-work domains. The time and place separations between home and work that exist for office-based workers do not arise as naturally for teleworkers; telework increases the permeability of boundaries between life domains, making it easier for one domain to intrude upon the other (Standen, Daniels, & Lamond, 1999). A study drawing on data from the 2001, 2006 and 2012 Skills and Employment Survey (SES) series found that telework was associated with higher levels of organizational commitment, enthusiasm and job satisfaction; however, it was also associated with working beyond formal working hours, expending voluntary effort, and work-life spillover (Felstead & Henseke, 2017).

Suppressing work-related thoughts, emotions, and behaviours can be challenging, because the simultaneous presence of work and non-work cues can blur the boundary between the two domains (Raghuram & Wieselfeld, 2004). For example, research conducted with UK telework professionals found that some experienced difficulty in putting an end to the working day (Kelliher & Anderson, 2010). The presence of work-related materials in visible areas of the home seems to exacerbate this boundary permeability. A study of public sector teleworkers in the UK showed the differential effects of having designated versus common spaces for work and non-work activities (Basile & Beauregard, 2016). Those with designated spaces for work activities seemed better able to disengage from work versus those that utilized shared spaces for work and home activities. Quotes from a teleworker with a designated space (p. 107) versus one who conducted his work activity out of his dining room (p. 108), respectively, illustrate this phenomenon:

> *I am one of the lucky ones, I actually have a dedicated office. I've got a door and a lock. So I didn't have to do the mental changing of shoes, it's a case of switching my computer off and closing the door.*

> *So I worked in the dining room for two years… So for two years whilst we had dinner, tea, lunch, the computers and my files sat next to us. It was far from ideal especially if the children had time off.*

Research suggests that teleworkers engage in boundary work to manage the integration of work and home roles exacerbated by telework. For example, Fonner and Stache's (2012) qualitative study of 142 teleworkers who engaged in telework at least one day per month found that teleworkers used space, time, communications and

technology strategies to manage the boundaries between their home and work activities. Participants identified closing their door of their home office at the end of the day as a space-related strategy for managing the work/non-work boundary and clearly communicating their work hours to both managers and family members as a time related-strategy. Similarly, teleworkers used communications and technology to manage work/non-work boundaries, for example by sending emails to notify colleagues that they were making the transition from home to work or shutting down work-related computers and turning off phones to mark the end of the workday.

Interestingly, technology seems to have become a doubled-edged sword in terms of managing work and home boundaries. The "always-on" culture promulgated by advances in ICT encourages workers to remain contactable and responsive beyond regular working hours (McDowall & Kinman, 2017). This pressure is exacerbated for teleworkers, who rely on technology to display their virtual presence and thus prove that they are working. Fonner and Roloff's (2012) study comparing the experiences of 89 high-intensity teleworkers and 104 office-based employees found that teleworkers struggled with the need to utilize technology to maintain a social 'presence' and social interactions with colleagues, while at the same time managing technology so that they were able to 'disconnect' from work during personal time. Therefore, the same resource teleworkers might use to manage their work-home boundary might reduce their ability to foster connections with others in the workplace. Similarly, Sewell and Taskin (2015) found that teleworkers' use of technology to engage in display behaviours that enhance their visibility and availability lead to feelings of being "shackled to their workstations at home" (p. 1519). Another study of work-related social media use found that the use of social media for work-related activities, such as finding experts in specific occupations or making others aware of one's own

professional activities, results in both greater work-to-life and life-to-work conflict (van Zoonen, Verhoeven, & Vliegenthart, 2016).

Research has also sought to examine whether the impact of telework differs in terms of the direction of work-to-life and life-to-work conflict. Allen, Johnson, Kiburz and Shockley's (2013) meta-analysis found that there are, indeed, differences in the conflict experienced when flexible working is an alternative. Their study demonstrated that flexible working arrangements were negatively associated with work-to-life conflict and that the degree of this association was stronger than that for life-to-work conflict. The meta-analysis also found some interesting differences in terms of whether time-based or place-based (telework) flexibility was used, with flexibility in terms of time leading to greater work-to-life conflict than flexibility in terms of place.

There is, however, research showing evidence that increased participation in telework is linked to higher levels of life-to-work conflict - particularly for those individuals with heavier caregiving responsibilities for children or adult dependents, which can intrude upon work activities more easily when the workplace is also the family home (Golden et al., 2006). Kossek et al.'s (2006) research on how people manage the boundaries between their work and personal lives has found that teleworkers who prefer to integrate their work and non-work activities – for instance, by switching back and forth between work and personal tasks throughout the day – are more likely to experience life-to-work conflict as a result of blurred boundaries.

19.1.6 Well-Being: Stress

The general consensus in the research literature is that telework is associated with significantly lower levels of work-related stress than those experienced by office-based staff (Gajendran & Harrison, 2007; Golden, 2006b; Raghuram &

Wieselfeld, 2004). Teleworkers who work at least three days a week at home report less stress generated by frequent meetings and interruptions by colleagues, and perceive less exposure to office-based politics (Fonner & Roloff, 2010). Other research has found that teleworkers encounter fewer job stressors, such as role conflict and ambiguity, than office-based staff, and that their resultant lower levels of work-related stress are in turn predictive of increased job satisfaction and commitment to the organization (Igbaria & Guimares, 1999).

These positive results may be explained by the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) of occupational stress and motivation. The model defines demands as physical or social aspects of a job that require effort and thus have physical and mental costs, and resources as workplace or organizational aspects that help with the achievement of work goals, reduce demands, or stimulate growth and development. Job demands lead to strain, whereas job resources lead to motivation. Telework would therefore appear to function more as a resource than as a demand.

However, this classification of telework may depend on individual differences among workers. For some, telework may function as a demand. For example, Anderson, Kaplan and Vega's (2015) diary study of 102 US government employees found that generally, employees had higher levels of positive affect and lower levels of negative affect on days when they worked from home. Individual differences impacted these affective experiences, however; employees with high levels of social connectedness and those rated highly on openness to experience were more likely to have positive affective gains on telework days, while those with a tendency toward rumination were less likely to experience positive affective gains. In addition, some scholars have found greater evidence of mental health problems among teleworkers,

compared to their office-based colleagues (Mann & Holdsworth, 2003). For instance, Kossek et al. (2006) found that formal participation in a telework arrangement was significantly associated with higher rates of depression - although for one specific group, female teleworkers with dependent children, rates of depression were actually lower than those of office-based staff.

Research also suggests that there may be a threshold at which the amount of time spent engaged in telework no longer yields positive outcomes. Golden and Veiga's (2005) study of 321 teleworkers at a high tech firm found a curvilinear relationship between levels of telework and job satisfaction, whereby satisfaction was highest at moderate levels of telework, but declined among extensive teleworkers. Another study of 261 teleworkers and their managers found that professional isolation increased at more extensive levels of telework, reducing performance outcomes (Golden et al., 2008).

There is mixed evidence regarding the nature of teleworkers' work-related stress. We know that teleworkers tend to put in longer hours of work and may exert greater intensive effort on the job, as discussed earlier in this chapter, and these factors may lend themselves to work-related stress in a way not experienced by office-based staff (Tietze & Musson, 2005). However, research seems to indicate that although teleworkers may work more overtime, they also report reduced feelings of time pressure compared to office-based workers, and this is particularly the case for those who spend more than one day per week working at home (Hill et al., 2001; Peters & van der Lippe, 2007). A qualitative study of work intensification among UK telework professionals found that workers did not experience negative outcomes from this intensification; instead, teleworkers appeared to be voluntarily increasing their levels of effort in exchange for the privilege of being able to work at home (Kelliher

& Anderson, 2010). The element of choice, or autonomy, involved in this extension of the working day and intensification of effort may serve to counteract any potentially stressful effects of longer work hours.

Other research examines teleworker engagement and exhaustion from a job-demands and resources model. Sardeshmukh et al.'s (2012) study of 471 teleworkers at a US-based supply chain organization found that while telework had a negative relationship with time pressure and role conflict, it was positively related to both autonomy and role ambiguity. However, findings also indicated that job demands and resources mediated the relationship between amount of time spent teleworking, exhaustion and engagement, again suggesting that contextual factors such as level of time pressure and degree of autonomy will impact telework outcomes. Further research suggests that gender may be an important indicator of stress-related outcomes associated with telework. A study of 101 Swedish government employees who recently began engaging in telework found that while all workers indicated that working from home relieved some of the stress associated with commuting and balancing work and family, women reported reduced levels of 'restoration' from being in the home environment, while men reported enhanced levels (Hartig, Kylin, & Johansson, 2007). This suggests that, for women, the benefits they accrue in terms of balancing work and family may be diminished due to increased levels of stress associated with the home environment.

19.1.7 Concluding Thoughts on Outcomes of Telework

The majority of the studies reviewed here are based on research conducted among workers who work from home part of the time but not all of the time. Working at home for the entirety of one's working week appears to be a relatively rare arrangement, and there are conflicting views among scholars about whether telework

works best as a moderate (one or two days a week) or a high-intensity (half the working week or more) activity. The practitioner-oriented literature is less equivocal, and tends to be of the opinion that to avoid the potential risks of telework, a non-exclusive telework arrangement is advisable for most organizations (Pyöriä, 2011).

A prospective counter-argument to this perspective derives from research findings that employee experience with telework intensifies the ability of working at home to decrease levels of work-to-life conflict and work-related stress. This suggests that there is a learning curve associated with telework, and that as workers adjust to the arrangement, they adapt over time to its advantages and disadvantages and develop ways to maximise the former while reducing the latter (Gajendran & Harrison, 2007). This can involve modifying one's use of technology to communicate with others, and amending one's work processes to better suit an environment free of office-based distractions but also lacking face-to-face contact and cues for taking breaks or finishing work for the day.

In addition to individual employees developing strategies to overcome some of the potential drawbacks of telework, managers can take steps to smooth the way. Scholars have suggested that managers reduce social isolation among teleworkers by scheduling regular staff meetings, providing intranet systems with which teleworkers and office-based staff can communicate with one another, releasing information bulletins to keep all employees informed of work-related news, and organising social events at which teleworkers and office-based staff can interact (Mann, Varey, & Button, 2000). Some have argued for the creative use of communication technologies to substitute for face-to-face interaction, such as telephone conference calls, video conferencing, and Web-enabled meetings (Potter, 2003). For instance, some organizations have created virtual 'watercoolers' online where employees can post

jokes and photos, and comment on workplace social events, football matches, or television programmes (McAdams, 2006).

19.2 Contributing Factors to Effective Telework

Having examined the outcomes of telework, we now turn our attention to factors that contribute to a successful telework experience. These can be grouped into three main categories: characteristics of the job, characteristics of the individual teleworker, and characteristics of the teleworker's manager(s). Compared to the number of studies conducted on the outcomes of telework, there is relatively little published research on any of these contributing factors.

19.2.1 Characteristics of the Job

Jobs characterized by individual control of work pace and little need for face-to-face interaction with colleagues or clients are generally thought to be most suitable for telework arrangements (Bailey & Kurland, 2002), but little empirical research has been conducted in this area. A notable exception is work by Turetken et al. (2011), who found that low task interdependence is associated with greater teleworker productivity, and that work output measurability is most important determinant of teleworker success as reported by HR managers. A common theme in the literature is the extent to which idiosyncratic details of individual jobs, rather than general job traits, are more likely to determine whether a particular employee can successfully engage in telework. Based on direct knowledge of what their work requires them to do, employees will often choose not to request or engage in a telework arrangement due to the belief that their jobs are not capable of being successfully performed away from the office. What this means is that perceptions of job suitability, generated by personal knowledge of specific jobs, may be a better predictor of who is suitable for telework than an assessment of general job categories.

19.2.2 Characteristics of the Teleworker

It is a generally acknowledged truth that in the majority of organizations, little is known about how to select the most suitable individuals to participate in telework arrangements, and this is supported by research conducted among employers (Verbeke et al., 2008). Surprisingly little research has investigated or found evidence for specific traits, skills, or motivations common to successful teleworkers. There is a great deal of guidance based upon 'common sense' assumptions or anecdotal evidence generated from observations of small numbers of teleworkers. For instance, managers have been advised that successful teleworkers must have the ability to work independently with little supervision, the ability to work without much social contact, and the personality traits of dependability and honesty (Baruch, 2001; Harpaz, 2002). Employers have also been warned to ensure that teleworkers are self-disciplined, organised and motivated, in order to segment work and home activities and manage effectively the distractions associated with the home environment (Mello, 2007; Raghuram & Wieselfeld, 2004).

Some research has asked teleworkers themselves about necessary qualities an individual should possess in order to be suitable for working at home. The teleworkers' responses largely echo the advice given to managers, by listing self-discipline, self-motivation, ability to work alone, and organizational skills as required attributes of a successful teleworker. Other features they identified were tenacity; self-confidence, time-management skills; and integrity (Baruch, 2000; Greer & Payne, 2014).

Moving beyond the realm of opinions and personal experience, more rigorously designed research finds that diligence and organizational skills are no more important for teleworkers than they are for office-based staff (O'Neill et al., 2009).

O'Neill et al.'s (2009) large-scale study of teleworkers and their office-based colleagues showed that need for autonomy, however, was much more strongly associated with self-rated job performance and job satisfaction for teleworkers than for office-based workers. People with a higher need for autonomy are those who prefer to set their own hours of work, plan their own work processes and schedules, and generally 'be their own boss': all activities congruent with telework. This trait has been advocated by scholars as an important one for telework, as teleworkers are usually expected to work without direct supervision and set their own schedule and methods for accomplishing their job tasks (Harris, 2003; Konradt, Hertel, & Schmook, 2003).

Several personality traits have also been linked to success in telework. While individuals high in openness to experience find the prospect of telework more attractive (Gainey & Clenney, 2006), those who are highly extroverted may have a more difficult time participating in this arrangement. In O'Neill et al.'s (2009) study, higher levels of sociability in teleworkers were related to lower job performance. People who are highly sociable are probably more likely to feel the absence of a workplace setting populated by others, and to feel socially isolated when working at home by themselves (Weisenfeld, Raghuram, & Garud, 2001).

19.2.3 Characteristics of Management

Scholars have argued that a successful telework programme is more a function of leadership than of technology, with a creative and progressive leadership mentality being required to design and implement telework schemes effectively (Offstein, Morwick, & Koskinen, 2010). The consensus in the telework literature is that managers must be willing and able to relinquish traditional notions of how best to manage performance – usually based on direct supervision – and adopt new ways of

motivating and monitoring their staff. Four themes that dominate the literature on management of teleworkers are those of trust, performance management, communication, and training.

19.2.3.1 Trust

In order for an organization to adopt a telework program, management must exhibit at least some trust in employees (Pyöriä, 2011). That having been said, managing teleworkers does represent a special challenge for managers, especially those who prefer to engage in direct supervision of their staff, with their employees in sight as often as possible. Managers may be concerned about their loss of direct control over teleworkers (Potter, 2003; Robertson, Maynard, & McDevitt, 2003), and may not be able to detect if or when an employee is experiencing difficulties, is working too much, or is not working enough (Manochehri & Pinkerton, 2003). Those managers who subscribe to 'Theory X' (McGregor, 1960) believe that workers are inherently lazy and motivated primarily by money and the threat of punishment. Theory X managers may therefore assume that teleworkers are likely to take advantage of the opportunity to slack off undetected at home. Managers who subscribe to 'Theory Y', in contrast, believe that intrinsic motivation plays a more important role than extrinsic motivation and that workers enjoy taking responsibility for their work and do not require direct supervision to complete their tasks. These managers are therefore more likely to exhibit trust in their teleworking subordinates.

One of the greatest barriers to telework success is the presence of traditional managerial attitudes about employees needing to be seen in order to be considered productive (Lupton & Haynes, 2000). These attitudes can often be quite resistant to change. Despite the advent of communications technology that enables individuals to work anywhere, at any time, many organizations continue to value and reward face-

time and operate under the assumption that visibility equates to productivity and commitment (Beauregard, 2011). There is little evidence that many organizations take the time to develop new management approaches geared toward alternative working arrangements such as telework. Research shows that in the telework context, trust is positively related to employee perceptions of good performance and job satisfaction, and negatively related to job stress (Grant et al., 2013; Staples, 2001). A culture of trust requires a re-evaluation of what it means to be "working", and how managers recognise and evaluate work. A critical component of such a culture is a results-based management system.

19.2.3.2 Performance Management

To adapt effectively to a telework programme, managers often need to change their monitoring strategies from behaviour-based to output-based controls (Konradt et al., 2003; Cooper & Kurland, 2002). Behaviour-based controls refers to the relatively common practice of assessing performance based on employees' observable actions, whereas output-based controls involve assessing performance based on output, products, or other deliverables of the work rather than on the process or behaviours used to generate the output. Madlock's (2012) study of full-time teleworkers found that managers of teleworkers were more likely to use a task-oriented rather than a relational-oriented leadership style, and that this task-oriented leadership was a significant predictor of teleworkers' job satisfaction, organizational commitment, and satisfaction with communication. Managers who cannot - or will not - modify their supervisory styles are likely to experience a deterioration of their relationships with telework subordinates (Shin et al., 2000).

Teleworkers' attitudes and behaviours will also be affected by the performance management system used. For example, research by Virick, DaSilva and

Arrington (2010) has found that when objective criteria such as goals and measurable targets are used to evaluate performance outcomes, there is no link between the extent of participation in telework and teleworkers' job satisfaction. However, when use of objective criteria in performance evaluation is low, and the organizational culture rewards visibility in the workplace, teleworkers exhibit higher job satisfaction when they work at home only one or two days per week rather than exclusively.

19.2.3.3 Communication

Scholars and practitioners alike have occasionally expressed concern than an organization's culture may lose strength as a telework programme gathers speed, because inculcating that culture in telework employees will be more difficult than doing so with office-based staff whose frequent face-to-face interactions sustain and reinforce organizational norms (Manochehri & Pinkerton, 2003; Mills et al., 2001). This potential for weakened culture will obviously depend on the organization; research evidence suggests that some cultures can easily be kept alive and well if constant communication among employees is not necessary (Gainey, Kelley, & Hill, 1999).

In almost all organizations, of course, some degree of communication among staff is required. Research investigating effective managerial communication approaches has determined that managers should stay in close contact with teleworkers, but this contact should emphasise information-sharing rather than close monitoring of work processes. Teleworkers with managers using an information-sharing approach have been found more likely to report lower work-to-life conflict, better performance, and higher rates of helping their co-workers (Lautsch, Kossek, & Eaton, 2009). Other communication strategies linked to greater job satisfaction, output, and loyalty among teleworkers include communicating job expectations in a

clear and concise manner, communicating job responsibilities, goals and objectives clearly, and clearly communicating deadlines (Ilozor, Ilozor, & Carr, 2001).

Communication strategies can be linked to leadership style. Brunelle's (2013) research with mobile workers describes their work context as one in which managers must be able to influence subordinates by means of asynchronous, remote communications rather than rely upon face-to-face interactions. Transformational leadership, which involves communicating a vision, creating meaning, empowering employees, and delegating, improves teleworkers' mental representations of effective behaviors to be adopted and facilitates teleworkers' identification with the organization and/or with their manager (Larsson, Sjöberg, Nilsson, Alvinius, & Bakken, 2007). Using a transformational leadership style may therefore enable managers to compensate for the potentially negative effects of distance on teleworkers' job-related attitudes (Brunelle, 2013).

The relative ease of face-to-face communication compared to making a phone call or composing an e-mail plays a role in determining managerial attitudes toward telework. Research conducted in an Italian call centre demonstrated that although line managers were technically capable of relying upon electronic monitoring to supervise their staff, the managers preferred that employees remained directly visible to them (Valsecchi, 2006). Having all staff physically present in the workplace and being able to wander around in sight of the call centre operatives assisted the line managers in their exercise of control over the pace and quality of work, and in communicating with employees during crisis situations that arose and disappeared in rapid succession.

This idea that communication is enhanced when it is done face-to-face is reinforced by a remark from a teleworker in Beauregard et al.'s (2013, p. 53) study of a large, public sector organization:

I find when you ring in sometimes, if your other colleagues are there when you are on the phone, you can hear what's going on but I suppose you don't feel part of it because you can't read people's expressions or anything to see a problem.

19.2.3.4 Training

The need for training has been discussed in much of the telework literature, with the general consensus being that teleworkers should be trained on the use of equipment, time management, and establishing boundaries between home and work (Greer & Payne; 2014; Haines III, St. Onge, & Archambault, 2002). The results of a telework study involving IBM employees demonstrated that good training is of vital importance to both teleworkers and their managers, and should focus not only on technology but also on social and psychological adjustments to be made by teleworkers (Hill et al., 1998). There is empirical evidence that organizational support and training can promote teleworkers' resilience and well-being. A quantitative research with a sample of 804 teleworkers from 28 organizations suggests that social organizational support (including supervisor, co-worker and organizational support) can help reduce psychological strain and social isolation (Bentley et al., 2016). Another study shows that teleworking employees participating in guided health discussions report less stress regarding time management, communication and ergonomic issues (e.g., body position while working) compared with a control group of teleworkers (Konradt, Schmook, Wilm, & Hertel, 2000).

Training companies providing client organizations with training for teleworkers cover topics such as setting up a home office, maintaining work relationships and professional credibility, and managing one's time, workload, and performance; specific training for managers of teleworkers addresses the creation and maintenance of a work environment that supports telework (Johnson et al., 2007).

Despite the discussion surrounding telework training and the innovations exhibited by select organizations, many employers lauded for their successful telework programs (such as Allianz Insurance UK, Ernst & Young UK, Intel, and LaSalle Investment Management) fail to offer any training specific to engaging in telework or managing teleworkers (Beauregard et al., 2013; Johnson et al., 2007).

19.2.4 Concluding Thoughts on Contributing Factors to Successful Telework

In general, the literature advocates a number of conditions to be met in order for a successful telework experience to take place. Some of these are technical in nature: job responsibilities must be able to be performed away from the office, and work spaces at employees' homes should be safe, secure, and reasonably distraction-free. Some conditions are concerned with the teleworkers themselves: successful teleworkers need to be able to work without close supervision, should be able to separate their work from their personal lives, and must be capable of overcoming the threats posed by working in isolation (O'Neill et al., 2009). Finally, scholars and practitioners emphasise that successful telework programmes are characterised both by broad institutional support, and by the presence of managers who understand the value of telework and have confidence in the benefits it can bring (Mello, 2007).

19.3 New Directions

While this chapter has reviewed a great deal of what we do know about telework's outcomes for the individual and how these might best be facilitated, there are undoubtedly gaps in our knowledge regarding the repercussions of telework for employees and organizations. Two such areas of note are the impact of telework on employees' extra-role performance, and on organizations' succession planning.

Although there are few studies of the relationship between telework and extra-role behaviours, recent empirical evidence suggests that those working from home are

likely to exhibit enhanced citizenship behaviour. Gajendran et al. (2015) found a positive link between telework and contextual performance, defined as 'a set of interpersonal and volitional behaviours that contribute to the organization by creating a positive social and psychological climate' (p. 3). Employees with access to the flexibility of working from home are likely to feel obligated toward those who granted them that access (their employer). To relieve that obligation, employees may not only work longer or harder but also reciprocate through discretionary citizenship behaviours.

This sense of reciprocity should be examined over time, however. Gajendran et al. (2015) found that telework normativeness moderated the relationship between telework and contextual behaviour. In other words, when telework was a relatively customary or normative aspect of a workplace, it weakened the intensity of the need to reciprocate the provision of telework. The moderating effect of normativeness can be explained by social exchange theory with the norm of reciprocity (Blau, 1964; Gouldner, 1960). When telework is perceived as a 'special' arrangement (i.e., individuals who telework are a small fraction of the work group), employees are more likely to feel indebted to the managers and organisation that provided them with special treatment and, thus, reciprocate by engaging in discretionary citizenship behaviours. Conversely, if telework is widely established in a workplace, teleworkers are likely to perceive such an arrangement as customary or normative. This normativeness may diminish teleworkers' level of indebtedness towards their managers and organisation, as the practice of telework is no longer perceived as a 'special' arrangement (Canonico, 2016). Might employees who avail themselves of telework arrangements develop a similar reduction in feelings of indebtedness over time, as telework becomes an established routine and perceptions of it being an extra

benefit decline? This question calls for further longitudinal research on the long-term impact of telework on teleworker perceptions of reciprocity and discretionary behavior.

With regard to succession planning, extended telework may influence this process in two ways. First, research has demonstrated that teleworkers' less visible presence in the workplace may reduce their opportunities for learning and development, potentially limiting their career advancement opportunities (Cooper & Kurland, 2002). In addition, teleworkers may find that the advantages they incur by giving up these opportunities in exchange for greater work-life balance outweigh the monetary or professional advantages associated with a higher level position. For instance, Beauregard et al.'s (2013) study of teleworkers in a UK public sector organization found that full-time teleworkers were less likely than occasional teleworkers to seek promotion if that required returning to office-based work. When asked about any potential drawbacks of telework for this organisation, one senior manager confirmed that the lack of teleworker interest in taking on roles that would require an increased presence in the office was likely to generate difficulties for organisational succession (Canonico, 2016). Further investigation of these links between telework and succession planning, over time and using quantitative as well as qualitative methods, might help to clarify the processes in play and assist researchers and practitioners to design telework policy and job design practices to overcome any problems that may exist.

In addition to further research investigating the gaps of which we are aware, research also needs to consider what telework practices may look like in the future. Research has found that the growth of telework statistically surpasses many of the common economic and demographic factors we often ascribe as its drivers. For

example, an analysis of trend data from the 1981-2015 Labour Force Series (LFS) surveys found that the increasing trend of work being completed away from a physical workplace far outpaces the growth of the 'knowledge economy', the increase in flexible working arrangements, and demographic shifts in the workforce (Felstead & Henseke, 2017). Therefore this calls for research on telework across a broader spectrum of contextual factors.

One possible avenue for research might be to look at the growing impact of multiple layers of cultural contexts, across organizations, industries and nations, in order to better explain the conditions under which telework will result in positive or negative effects. Beauregard, Basile and Thompson (2018) have proposed a model that examines the impact of national culture on organizational policy, organizational culture and individual work-life role preferences. For example, an individual's national culture may influence their preferences as to how they manage their work and non-work roles; women from countries with low levels of gender egalitarianism may more likely to take of a telework role to meet their family obligations than men (Powell, Francesco & Ling, 2009). In addition, national culture will also influence the more formal (institutional) industrial/organizational work-life policies, as well as attitudes toward the usage of these policies (Ollier-Malaterre & Foucreault, 2017; Piszczek & Berg, 2014). For example, Sweden's recent adoption of a six-hour workday will influence both formal organizational work-life policies as well as more informal practices amongst workers with reduced scheduled (Matharu, 2015). The model suggests that when there is alignment between national culture, organizational culture and individual preferences, individuals are able to develop a "coherent work-family role orientation" resulting in organizational citizenship behaviours (OCBs), well-being and satisfaction with work-life balance; misalignment results in a

"dissonant work-family role orientation' resulting in work-life conflict, stress, reduced OCBs, productivity and higher turnover (Beauregard, Basile & Thompson, 2018).

19.4 Implications for Theory and Practice

Based on the evidence presented in this chapter, we can conclude that the effects of telework on performance and well-being are becoming more and more nuanced. This can be attributed to an increasing number of contextual factors that influence the telework experience, such as telework intensity, task interdependence, communications richness and frequency, as well as organizational and national culture. Therefore extant theory must be re-examined and new theory developed to account for the more complex landscape in which telework takes place. For example, Piszczek and Berg's (2014) article on the impact of regulatory institutions on HR practices and individual integration segmentation preferences helped to expand on boundary theory, thus addressing one area of contextual importance.

Research on telework and work-life boundary management has clearly identified that individuals react differently to differing levels of home and work integration (Beauregard et al., 2013; Shockley & Allen, 2010). In addition, research has also established the importance of autonomy and control in telework experiences (Kelliher & Anderson, 2008; Kurland & Egan, 1999; Lautsch et al., 2006). Eligibility for participation in telework arrangements should therefore take into account individual preferences and abilities for independent, self-directed scheduling and work performance in order to gain the intended benefits of these programs. Assessing employees for these preferences and telework-related abilities before they engage in working away from the office on a regular basis may help to predict telework success, and could be used to screen candidates for their suitability. Such an assessment could

also form part of telework induction training, and help both employees and managers to plan for the new arrangement and to anticipate problems that might arise.

Organizations may also seek to do further assessment and engage in the development of more tailored approaches to telework for employees with differing preferences and boundary management tactics. For example, one group of researchers has created a tool named the 'Work-Life Indicator', which could be of use to both individuals and organizations in terms of assessing an individual's boundary management profile (Kossek et al., 2012). This instrument assesses role transition behaviours, the centrality of work and non-work roles, and perceptions of control over the management of their work and non-work boundaries. Another researcher has developed an assessment tool to measure the impact of telework on employees by assessing eight dimensions, including work effectiveness, management style, trust, role conflict, boundary management, and well-being, both before and after engaging in a telework arrangement (Grant, 2017). This too could be used by organizations to help managers identify and address any difficulties employees encounter in adjusting to their new work arrangement, via coaching or training.

Based on this review of the telework research literature, we recommend that evidence-based guidelines be developed and made available to organizations for the successful implementation and management of telework. These recommended guidelines are summarized in Table X.1 and should address 1) implementation requirements, 2) employee eligibility, 3) employee suitability, 4) trial period and training, 5) intensity of telework, and 6) termination. Basic conditions for the successful implementation of telework in an organization include having senior leaders who are strong advocates of the practice, work that is easily measured and quantified, a robust business case to overcome potential internal resistance to

telework, IT systems that can support telework, and written formal policies that clarify expectations and conditions of work (Meadows, 2007). These policies should be visible and easily accessible to all members of the organization (Beauregard et al., 2013). Employee eligibility criteria should require having a space to work at home that complies with health and safety regulations, assigned tasks that can be performed remotely without adverse effect on the business (e.g., that continue to fulfil clients' needs), and a good track record in terms of performance (Beauregard et al., 2013; Busch, Nash, & Bell; 2011). For instance, research clearly identifies that the ability to work in a separate location within the home leads to more beneficial telework outcomes (Mustafa & Gold, 2013; Sullivan, 2000).

In terms of employee suitability, employees should have appropriate skills (e.g., communication skills, self-motivation) and express a preference for teleworking. While more research is needed to fully understand the impact of voluntary vs. involuntary telework, inconsistent findings from prior research may be explained by differences in employee attitudes toward telework (Allen et al., 2013). For example, a study of 251 sales professionals found that involuntary telework led to higher levels of strain-based work-to-family conflict and, among those who indicated low self-efficacy for managing the multiple demands of the home and work environment, there was an increase in both time and strain-based work-to-family conflict (Lapierre et al., 2016). This suggests that attitudes toward telework are unlikely to be positive if telework has been imposed on rather than chosen by employees, and negative attitudes are more likely to produce negative outcomes. Managers should therefore avoid obliging employees to engage in telework, especially without adequate training in place for those who do not already possess preferences and abilities for working independently and alone.

It is common amongst organizations that offer telework to their employees to require a test or trial for a determined period of time. Actual implementation of telework usually involves a formal process with paperwork (e.g., contractual change to terms and conditions of employment, consent form), physical set-up (e.g., internet connection, IT equipment, furniture), and procedures and guidance that are made available to both employees and managers (Beauregard et al., 2013). This guidance includes recommendations to managers of teleworkers to agree a regular schedule of formal communications, to foster frequent, informal communications with teleworkers, and to conduct regular assessments of telework conditions. Teleworkers are advised to actively engage in regular, formal communications and frequent, informal communications with their manager and co-workers and to make use of good time management practices.

Extent or intensity of telework may also be an important contributing factor to telework success. Research suggests that moderate versus extensive telework leads to better outcomes in terms of exhaustion, job satisfaction, isolation and recovery (Golden, 2012; Golden & Veiga, 2005; Hartig et al., 2007). Regarding termination, organizations usually reserve the right to cancel the telework arrangement at any time and base the teleworker at an office. Good practice involves consulting the teleworker and giving notice in advance that the provision of telework is being retracted (Beauregard et al., 2013).

Lastly, there are some crucial organizational elements that need to be in place for telework to succeed. These include an organizational culture characterized by trust and openness, an objectives-based performance management system, and an adapted physical workspace that can accommodate teleworkers when they come to the office.

Telework programs should be designed with these specifications in mind in order to

facilitate the best outcomes for both employees and the organization.

Table 19.1: Summary of Best Practices

Implementation	• Top leaders who are strong advocates of telework • Work that is easily measured and quantified • A robust business case to overcome potential internal resistance to telework • IT systems that can support telework • Written formal policies that clarify expectations and conditions of work and that are visible and easily accessible to organizational members
Employee eligibility	• Space to work at home that complies with health and safety regulations • Assigned tasks that can be performed remotely without negatively impacting the business • Good track record of performance
Employee suitability	• Communication skills, self-motivation, ability to work independently • Preference for telework
Trial period and training	• Test or trial for employees to telework for a determined period of time • Formal process with paperwork (e.g., contractual change, consent form) and physical set-up (e.g., internet connection, IT equipment, furniture) • Guidance for managers of teleworkers including agreeing formal communications, fostering informal frequent communications with teleworkers, and conducting regular assessments of teleworking conditions • Guidance for teleworkers including actively engaging in regular formal communications and frequent informal communications with their manager and co-workers, and making use of good time management practices
Intensity of telework	• A maximum of two to three days per week spent working from home
Termination	• Organizations reserve the right to cancel the telework arrangement at any time and base the teleworker at an office • Teleworker is commonly consulted and given notice in advance of termination of telework agreement
General organizational best practices	• A 'trust and openness' culture • Adequate systems in place (communications, IT equipment and support) • Objectives-based performance management system • An adapted physical workplace to allow teleworkers to work and interact with their colleagues when they come to the office

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