The role of organisational support in teleworker wellbeing: A socio-technical systems approach

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ABSTRACT

The prevalence of telework and other forms of mobile working enabled by digital technology is increasing markedly. Following a socio-technical systems approach, this study aims to examine the role of organisational social support and specific support for teleworkers in influencing teleworker wellbeing, the mediating role of social isolation, potentially resulting from a person-environment mismatch in these relationships, and possible differences in these relationships between low-intensity and hybrid teleworkers. Teleworkers' (n = 804) perceptions of support and telework outcomes (psychological strain, job satisfaction, and social isolation) were collected using an on-line survey of teleworking employees distributed within 28 New Zealand organisations where knowledge work was undertaken. Organisational social support and teleworker support was associated with increased job satisfaction and reduced psychological strain. Social isolation mediated the relationship between organisational social support and the two outcome variables, and some differences were observed in the structural relationships for hybrid and low-intensity teleworker sub-samples. These findings suggest that providing the necessary organisational and teleworker support is important for enhancing the teleworker-environment fit and thereby ensuring desirable telework outcomes.

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1. Introduction

There is little doubt that the nature of work is changing and mobile working enabled by advanced technology is an important mega-trend in the future of work. One such arrangement, telework, also known as telecommuting, remote working, agile working and anywhere working, is becoming increasingly popular and a common feature in work life due to advances in digital technology and changing attitudes towards where and when work is undertaken. To date, ergonomics research has paid little attention to this phenomenon, despite mobile work being identified as an important future of work/future of ergonomics concern for the discipline (Drury, 2008).

Telework has grown in popularity due largely to advances in Information and Communication Technologies (ICT) (e.g. broadband Internet, mobile devices, social media, cloud computing, and networking tools). As well as providing organisations and individuals with flexibility about when and where work takes place, telework and other forms of anywhere working have been viewed as a corollary of the push for organisations to move to network-based operating structures where employees are no longer tied to geographic locations (Bayrak, 2012). The requirement for organisations in some countries to consider requests from employees to switch to flexible working arrangements has been another key driver for telework adoption. Furthermore, telework popularity has risen as a result of speculations promoted by advocates of flexible working that telework arrangements can modernise workplace practice (Troup and Rose, 2012).

Telework has been defined as "… a flexible work arrangement whereby workers work in locations, remote from their central offices or production facilities, with no personal contact with co-workers, but the ability to communicate with co-workers using ICT" (Di Martino and Wirth, 1990). This non-standard form of organisational dynamic presents unique challenges to teleworkers, managers and organisations (Rasmussen and Corbett, 2008; Bosua et al., 2013; Dahlstrom, 2013). Telework typically takes place in the home, but may also occur on the road, in a co-working centre, smart centre or digital work hub, or in other remote contexts. In most

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cases, the teleworker is isolated physically from their organisation, raising questions about how teleworkers relate to their colleagues and their organisation, and how best to provide support to ensure teleworker satisfaction, wellbeing, safety and performance.

A number of meta-analyses have been conducted in recent years in an attempt to understand the potential benefits and drawbacks of teleworking. Gajendran and Harrison (2007), for example, found positive outcomes for teleworkers, including increased job satisfaction, performance, autonomy and reduced work-family conflict (WFC). More recently, a meta-analysis by Martin and MacDonnell (2012) found positive relationships between telework and organisational outcomes, including perceived productivity, improved retention and organisational commitment, and improved performance within the organisation. However, the literature suggests that not all telework arrangements are effective and that negative outcomes are observed under some conditions (Mahler, 2012; Sardeshmukh et al., 2012; Tremblay and Thomsin, 2012), including social isolation (Golden et al., 2008), co-worker dissatisfaction (Golden, 2007), and the so-called 'telework divide', where negative impacts have been observed for those barred from telework (Mahler, 2012). Moreover, telework appears to be a time-dependent concept (Neufeld and Fang, 2005; Bélanger et al., 2012), with negative effects observed in some studies where telework intensity exceeds two or three days per week (Gajendran and Harrison, 2007).

Bélanger et al. (2012) argue that socio-technical systems theory can be utilised to theorise and analyse how multiple factors jointly contribute to telework outcomes (Bélanger et al., 2012). From a socio-technical systems perspective (Trist, 1981; Eason et al., 1996; Lyytinen and Newman, 2008), and in line with Bélanger et al.'s (2012) conceptual model, organisational support in the telework context should address technical, person, and organisational subsystems elements. The better the 'fit' between these sub-system elements, the more effective telework will be in terms of desired outcomes for the individual and organisation, whereas mismatches between system elements may result in work system failures and undesired outcomes. For example, person-environment fit problems (Haines et al., 2002) such as social isolation can occur where there is inadequate support for teleworkers, who are dependent upon technology and management support for coordinating their activities and collaborating with co-workers (Baker et al., 2006a, 2006b).

The major contribution of the present study, therefore, is to examine the role of organisational social support and specific teleworker support as predictors of desirable teleworker outcomes, considering the relative influence of each. The study examines the role of both forms of support in reducing psychological strain and enhancing job satisfaction. Based on the socio-technical systems approach and the notion of person-environment fit (Haines et al., 2002), the study also examines the mediating role of social isolation in the relationship between organisationally-derived support and these telework outcomes. The study considers the relationships between these study variables for two distinct teleworker cohorts: low intensity teleworkers, who may be day extenders, using technology to telework a few hours per week, verses hybrid teleworkers, who work one or more days per week remotely.

1.1. Theory and hypotheses

1.1.1. Linking organisational social support and teleworker support with teleworker job satisfaction

Job satisfaction comprises individual perceptions of task activities, achievement, rewards, working conditions, and management practices. Stated more succinctly, it is a positive emotional state coming from an individual's subjective experience of their job

(Locke, 1976). It is well understood that social interaction in the workplace is an important determinant of job satisfaction (Sims et al., 1976). It would, therefore, follow that a reduced frequency of interactions between teleworkers and their co-workers, due to the remote working arrangements, should impact negatively on telework job satisfaction. Given these concerns, it is argued that organisational support is of key importance in enhancing teleworker satisfaction and wellbeing, helping to reduce the potential loss of satisfaction and wellbeing due to lower levels of social interaction associated with telework.

Perceived organisational support (POS) is the degree to which employees believe that their organisation values their contributions and cares about their well-being (Eisenberger et al., 1997), while perceived social support refers to how much employees perceive that they are supported by their co-workers and supervisor (O'Driscoll, 2000). Both constructs are understood to be predictors of wellbeing outcomes in the workplace and are therefore considered to be important to telework outcomes. Importantly, specific support of teleworkers is thought to have an important influence on telework outcomes as telework differs from work undertaken in the central workplace in important ways and therefore requires a different management approach in order to yield productive outcomes (Bosua et al., 2013). Indeed, Lautsch et al. (2009) reported that teleworkers supervised with an information sharing approach were more likely to enjoy lower work-family conflict and increased work performance. Other authors have noted the importance of relationship-oriented behaviour when managing teleworkers, as opposed to task-oriented behaviour (Dahlstrom, 2013). For example, Kowalski and Swanson (2005) report that management support, communication and trust are critical success factors for telework. Trust appears to be a key determinant of telework effectiveness, impacting on telework attitudes and performance in the telework environment (Baker et al., 2006a, 2006b). Other telework support factors examined in empirical research include: teleworker interaction with colleagues and manager (Neufeld and Fang, 2005); job resources, support and feedback for teleworkers (Sardeshmukh et al., 2012). Each of these studies reported a relationship between support for teleworkers and either positive telework outcomes, including satisfaction (Golden, 2006; Golden and Veiga, 2005), or absence of negative telework outcomes. Furthermore, Babin and Boles (1996) found that supervisor support reduced stress and increased job satisfaction.

The little research that has been conducted looking at technical support for teleworkers suggests this form of support is essential for positive telework outcomes. Indeed, technical support is necessary to ensure effective coordination with the central office and co-workers (Bosua et al., 2013). Furthermore, research has indicated that the more that an individual teleworks the more support is sought and the greater level of formal support is required with regard to technology and training (Baker et al., 2006a, 2006b; Bayrak, 2012). As a result, it is expected that teleworker job satisfaction will increase as organisational social support and teleworker support increase.

Hypothesis 1 Organisational social support will be positively related to job satisfaction.
Hypothesis 2 Teleworker support will be positively related to job satisfaction.

1.1.2. Linking organisational social support and teleworker support with teleworker psychological strain

Psychological strain and stress are often used interchangeably in the context of wellbeing research. Job stress has been described as the harmful physical and emotional responses that occur where the