Self-efficacy and Telework Satisfaction: The Moderator Role of Perceived Organizational Support

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Abstract

This study aims to explore whether self-efficacy is associated with telework satisfaction, especially in the situation of the COVID-19 pandemic. Moreover, the present study is also interested in finding whether perceived organizational support moderates the relationship between self-efficacy and telework satisfaction. Specifically, we expected that the association between self-efficacy and telework satisfaction would be stronger as perceived organizational support increases. Using the survey data collected from 158 participants who telework extensively, our result suggests that there is a significant positive relationship between self-efficacy and telework satisfaction. However, the moderation effect of perceived organizational support was found to be insignificant in the self-efficacy and telework satisfaction relationship. Although our result did not support the interaction effect, we found that the highest telework satisfaction appeared from the group of employees who showed a high-level of both self-efficacy and perceived organizational support. This implies that self-efficacy and perceived organizational support may play a crucial role in determining telework satisfaction. Implications for research and practical suggestions for the management of teleworkers are presented.

Keywords: telework, self-efficacy, perceived organizational support, telework satisfaction, working from home

Self-efficacy and Telework Satisfaction: The Moderator Role of Perceived Organizational Support

Already in 2018, well before the COVID-19 pandemic and national lockdowns, approximately 5 million members of the U.S. workforce reported teleworking (also known as telecommuting) at least half-time or more (Global Workplace Analytics, 2018). About 4% of the U.S. workforce having a work arrangement at least half-time or more as teleworking may seem a relatively small amount. In fact, before the COVID-19 outbreak, teleworking was recognized as a privilege to many employees, a benefit that is only offered by certain sectors of organizations such as IT companies. This may be one explanation for the scarce of interest in scientific research, which investigates individual differences with regard to telework (Allen et al., 2015; Kelliher & Anderson, 2010). However, the outbreak of COVID-19 completely changed the perception of teleworking. Government regulations and national lockdowns took place in order to prevent the outspread of the COVID-19 virus, which made almost impossible to work in the office. Due to inevitable circumstances, millions of workers are now working from home. As working from home has become 'the new normal', individuals' teleworking and its outcomes are receiving its attention to researchers. A recent survey has found that more than 50% of the U.S. employees worked from home at least 3 days per week in 2020 (Statista, 2021).

Although it has been found that many employees are engaged in telework settings during the COVID-19 pandemic, very little is known about which individual and organizational factors make someone successful in teleworking (Harpaz, 2002). Understanding these factors is increasingly important considering the current COVID-19 pandemic when companies are forced to let their employees work from home. A meta-analysis showed that the success of telework has important organizational implications, such as increased productivity, commitment, and performance (Martin & MacDonnell, 2012). In

the future, it is crucial for organizations to strengthen their employees' telework satisfaction for positive organizational outcomes.

Advantages and Disadvantages of Telework

Telework (also known as telecommuting) can be defined as a "work arrangement in which employees perform their regular work at a site other than the ordinary workplace, supported by technological connections (Fitzer, 1997, p. 65)." According to Madsen (2003), the concept of telework depends on various telework characteristics. For example, one may consider telework place, when do employees telework (during traditional working hours or flexible working hours), or the number of teleworking hours (Nakrošienė et al., 2019). One of the most actively involved characteristics in telework research may be telework intensity, which is the amount of teleworking time (Gajendran & Harrison, 2007). Telework intensity ranges from full-time to part-time telework. High-intensity teleworkers are those who work more than three days a week away from traditional office setting, whereas low-intensity teleworks work remotely only for one or two days a week (Gajendran & Harrison, 2007). As Konradt et al. (2003) suggested that high-intensity teleworkers had different motivations for teleworking compared to low-intensity teleworkers and this study took place amid the widest lockdowns between 2020 to 2021 due to the COVID-19 pandemic, the present research focuses on high-intensity teleworkers.

Previous studies on telework have found a number of advantages for individuals. These advantages include increased control over their daily schedules (Sardeshmukh et al., 2012), higher job satisfaction (Pratt, 1999), and increased productivity (Bailey & Kurland, 2002). These findings are in accordance with a recent meta-analysis, which confirmed a positive association between telework and job satisfaction (Gajendran & Harrison, 2007). However, although employees who telework are more satisfied with their job, they seem to face some unique challenges as the extent of teleworking increases (Gajendran & Harrison,

2007). For example, as individuals spend more time teleworking, communication challenges can arise from physical dispersion, reducing the quality of work-related communication between colleagues and supervisors (Gajendran & Harrison, 2007). The unstructured and highly flexible working conditions may also lead employees to disengage from their work (Sardeshmukh et al., 2012). In addition, employees who telework more extensively may experience frequent interruptions when working from home (Bailey & Kurland, 2002).

Overall, it seems evident that telework has numerous advantages for individuals. However, there is also a possibility that individuals are exposed to the negative effects of teleworking due to inevitable circumstances when employees are forced to work at home more extensively. Therefore, in order to reap the full benefit of teleworking, it will be important for organizations to acknowledge factors associated with teleworking outcomes, and set proper strategies to boost teleworking benefits.

Self-efficacy and Telework Satisfaction

Self-efficacy can be defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance. It is concerned not with the skills one has but with the judgments of what one can do with whatever skills one possesses" (Bandura, 1986, p.391). In other words, self-efficacy refers to self-assessed expectations/beliefs of one's performance. Self-efficacy is usually understood as being domain or task-specific and often measured as one single domain (Lusczynska et al., 2005; Scholz et al., 2002). However, self-efficacy was also conceptualized in a generalized way which refers to a broad sense of personal belief to cope with a variety of stressful situations (Schwarzer & Jerusalem, 1995). According to Schwarzer and Jerusalem (1995), *General self-efficacy* (GSE) reflects generalization across various domains in which individuals judge whether they are efficacious in functioning. Thus, GSE may explain a

broader range of coping behaviors and outcomes when the environment is less specific (Schwarzer & Jerusalem, 1995).

Considering the fact that nation-wide lockdowns and government regulations force employees to telework almost solely, it may be hard for individuals to merely focus on working remotely since work and family demands always coexists. In addition, the ambiguous and unstructured remote working environment may influence work and family boundaries to be blurred, preventing individuals from prioritizing work-related duties. Since employees are working from home, there is also a possibility that they may face a variety of stressful situations. For instance, individuals may find it hard to concentrate on their work tasks due to a lack of office supplies, a workstation that is not fully detached from living space, or household chores that need to be taken care of. All of the aforementioned leave work in a less task-specific manner compared to traditional office settings, which implies that self-efficacy needs to be considered across various domains of functioning in such remote working contexts. Therefore, when it comes to teleworking (especially during the time of the COVID-19 pandemic), GSE seems particularly well suited to investigate perceived self-efficacy of employees who work from home.

According to Locke (1976), job satisfaction is a positive emotional state which results from the appraisal of one's job experiences. In the telework context, this can be interpreted as one's pleasurable emotional state that results from the evaluation of teleworking experiences. Due to the COVID-19 pandemic, employees are forced to work from home and are more exposed to telework environment. This sudden change in the working environment may affect individuals' emotional state, which results from the appraisal of current teleworking experiences. Thus, understanding the antecedents and outcomes of telework satisfaction is important for organizations in order to maintain employees' positive emotional state.

As Nelson (2006) noted, employee's satisfaction is priceless. Several studies have suggested that boosting job satisfaction has important implications for both individuals and organizations (Linz, 2002). For instance, job satisfaction has been found to be a predictor of employees' health and absenteeism (Faragher et al., 2005; Roelen et al., 2008), as well as job transitions (Akerlof et al., 1988). It was also found that job satisfaction is positively associated with job performance, organizational commitment (Yousaf, 1998), and productivity (Judge et al., 2001). In addition, Visser and his colleagues (2003) suggested that job satisfaction has a protective effect on the relation between work disengagement and occupational stress. This impact on job satisfaction seems to have similar results when it comes to teleworking. Not surprisingly, a recent meta-analysis showed that the success of telework may lead to increased productivity, commitment, and performance of the employees (Martin & MacDonnell, 2012). All these findings suggest that telework satisfaction may play a crucial role in order to derive positive work-related outcomes in the telework context.

There is numerous evidence that individuals' belief actually affects one's job-related performance. Not surprisingly, self-efficacy was found to have positive impact on diverse work-related outcomes. In the concept of psychological capital, Sweetman and Luthans (2010) suggested that self-efficacy could be a crucial determinant of work engagement. This proposition was supported by a recent empirical study, which showed that there is a positive and significant relationship between self-efficacy and work engagement (Del Libano et al., 2012). It was also found that individuals with higher self-efficacy tend to experience higher performance level because they are motivated to invest greater effort and are more persistent when faced with challenges (Gist & Mitchell, 1992). In addition, people with high self-efficacy are found to be more likely to attain valued outcomes in the workplace, which is associated with a higher level of job satisfaction (Judge & Bono, 2001). These empirical evidences make it easier to understand why self-efficacy was considered as an individual

resource, which was found to be an additional source of well-being, motivation, and adaptivity (Van den Heuvel et al., 2010; Xanthopoulou et al., 2007).

Traditional office setting allows individuals to continuously be aware of work-related processes, reinforcing their focus on work. For example, supervisors and colleagues are co-located in the office, which may remind employees of work-related tasks. Working hours are generally fixed, allowing employees to continuously focus on daily work duties. When faced with challenges, it is not difficult for one to find a solution to a problem or get advice because supervisors and coworkers are available. Thus, in a traditional office setting, individuals are more likely to be exposed to work-related cues which help them define and focus on their job tasks as well as the process of how work should be done. However, in a remote work setting (i.e, working from home), working hours are less likely to be clearly defined, making the work environment relatively more fluid and unstructured compared to traditional work settings. Individuals may rely heavily on their own ability to organize the work schedule to execute daily tasks since a specific time to begin or end of the workday is not mentioned. Immediate communication with co-workers and supervisors might be difficult when working from home, which minimizes the work-related interaction and the availability of work-related advice reducing one's focus on the current task (Gajendran & Harrison, 2007). This poses that when faced with work-related difficulties in the teleworking environment, individuals may need to depend on their own skills and ability to cope with such challenges.

Self-efficacy theory suggests that there is a difference between individual resources, which influence whether individuals set challenging goals, show persistence in performance when facing difficulties and failures, and invest efforts to achieve successful outcomes (Bandura, 1997). Considering the fact that many employees are forced to work from home due to the COVID-19 pandemic and this sudden change in the working environment was unexpected, individuals with higher self-efficacy might show better adaptivity in such

challenging situations. For instance, teleworkers with high self-efficacy beliefs may be better able to arrange work activities into the time periods when one can be more focused (Duxbury et al., 1992), being more productive compared to individuals with low self-efficacy beliefs (Staples et al., 1999). In other words, telecommuters with high self-efficacy beliefs tend to have greater work scheduling latitude, which refers to the ability to schedule work-related tasks in order to achieve valued outcomes (Baltes et al., 1999). A similar association was found in an empirical study of telework which suggests that telecommuters' self-efficacy is positively related to individuals' structuring behavior (Raghuram et al., 2003). Research has found that teleworkers with greater self-efficacy implement behavior strategies such as planning, prioritizing, and organizing work-related tasks in order to meet their job responsibilities (Raghuram et al., 2003). These findings also imply that individuals with high self-efficacy may experience less work-life conflict by proactively scheduling their time, which minimizes interference between work and family demands (Raghuram & Wiesenfeld, 2004), and therefore more satisfied with their work lives (Baltes et al., 1999).

Various self-efficacy literature supports that successful adjustment to meet new environmental demands is more likely to occur among individuals with high self-efficacy beliefs (Black et al., 1991). Since self-efficacy could be interpreted as the degree of confidence that individuals have in their ability to accomplish tasks (Bandura, 1986), individuals with higher self-efficacy may be more motivated to exert greater effort to adapt to a new remote working environment (Gist & Mitchell, 1992). Considering that the COVID-19 pandemic forced many employees to work at home, this sudden change in the working environment may require individuals to learn new technological skills to carry out job tasks. In such cases, telecommuters with greater self-efficacy could be more motivated to attend virtual meetings and trainings, allocate more time to get familiar with new work-related software and proactively look for technological support when faced with difficulties. When

adjustment is successful, this may result in employees' performance effectiveness and satisfaction (Caliguiri et al., 1998; Saks, 1995). These attitudes are in line with self-efficacy literatures, which have found that self-efficacy is associated with work-related performance such as adaptability to new technology (Hill et al., 1987) and coping with difficult career-related tasks (Stumpf et al., 1987).

Overall, such behaviors may allow individuals to be more likely to obtain valued outcomes and derive satisfaction in the process of adjustment (Bandura & Schunk, 1981; Judge & Bono, 2001). This implies that individual belief may play an important role as personal resources in the teleworking context and self-efficacy theory seems particularly well suited to investigate whether individual differences actually affect work-related satisfaction. In sum, considering the aspects of self-efficacy, self-efficacious employees might be able to easier overcome the challenges of working from home with strategic scheduling behavior and better adjustment to meet new work demands. Thus, we expect that employees with higher self-efficacy beliefs will experience greater telework satisfaction.

Hypothesis 1: Self-efficacy will be positively related to telework satisfaction

Perceived Organizational Support as a Moderator

Perceived organizational support can be defined as employees' beliefs regarding the extent to which "the organization values their contributions and cares about their well-being (Eisenberger et al., 1986, p.501)." Based on the social exchange theory, perceived organizational support would create a feeling of obligation among employees, leading them to contribute to the development and efficiency of the organization (Eisenberger et al., 1986). In other words, individuals who feel supported by their organization would develop favorable attitudes and behaviors toward the organization in return for the positive treatment they have received (Rhoades & Eisenberger, 2002). Numerous research have found that perceived organizational support is positively associated with work engagement (Zacher & Winter,

2011), work performance (Eisenberger et al., 2001), and job satisfaction (Riggle et al., 2009) while negatively related to burnout (Riggle et al., 2009). Perceived organizational support was also found to play a contingent role in determining workers' attitudes and behaviors (Hur et al., 2013), which has been found to have a moderating effect on the relationship between role stressors and job satisfaction (Stamper & Johlke, 2003).

As Lazarus (1991) noted, organizational support can be an important job resource that may have a crucial role in understanding telework satisfaction. Perceived organizational support involves helping employees not only socioemotionally but also by providing ideas, technology, and physical assistance (Eisenberger et al., 1986). In addition, high organizational support allows employees to remain task-focused, feel safe, and more engaged (Kose, 2016). These findings may suggest important implications regarding the relationship between self-efficacy and job satisfaction in the teleworking context. As mentioned before, employees with greater self-efficacy will find their teleworking more satisfying because they are more motivated and demonstrates better adjustment. When self-efficacious employees feel that they are highly supported by the organization, the feeling of connection and assistance would act as an additional source of resources which allows them to be more focused and more engaged when working from home (Kose, 2016). In other words, when perceived organizational support is high, there is a higher possibility that self-efficacious employees will indicate greater telework satisfaction because they are more focused and more engaged in teleworking.

In order to derive higher job satisfaction among self-efficacious employees, it is also important to supplement a facilitator which can turn a 'can do' attitude into action (e.g., Chiaburu & Lindsay, 2008). As employees tend to develop favorable behaviors towards organizations when they feel supported by their organizations (Rhoades & Eisenberger, 2002), we can expect that perceived organizational support acts as a facilitator, which encourages employees' action. Self-efficacious employees are found to behave more strategically and

make better adjustments (higher ‘can do’ attitude) in the telework setting compared to those who have low self-efficacy beliefs. When self-efficacious employees feel that they are supported by their organizations, we can expect that actions such as structuring behavior and adjustments will be observed more often because perceived organizational support allows employees to develop favorable actions. In other words, self-efficacious employees may feel more confident to take appropriate action which may help them to achieve work-related goals (Erdogan et al., 2004; Rhoades & Eisenberger, 2002), ultimately being more satisfied with their job. Thus, self-efficacious employees will reap the full benefit of perceived organizational support compared to those with low self-efficacy beliefs, indicating greater telework satisfaction.

Other studies have also found that perceived organizational support moderates the relationship between personal resources and job satisfaction. Wikhamn and Hall (2014) have found that perceived organizational support moderates the relationship between accountability and job satisfaction. Cheng and Yi (2018) also observed that perceived organizational support moderates the relationship between job crafting behavior and job satisfaction, higher perceived organizational support affecting the relationship stronger. Consistent with the findings, we can expect that perceived organizational support may be a great facilitator, which allows self-efficacious employees to be more engaged in their work tasks, especially in the teleworking condition where individuals need to rely heavily on their own skills and abilities. In other words, employees who feel supported by the organization will benefit the most of self-efficacy on telework satisfaction. Thus, we propose that perceived organizational support will act as a moderator in the relationship between self-efficacy and telework satisfaction, such that the relationship will be stronger when perceived organizational support increases.

Hypothesis 2: The relationship between self-efficacy and telework satisfaction would be moderated by perceived organizational support, such that the relationship is stronger as perceived organizational support increases.

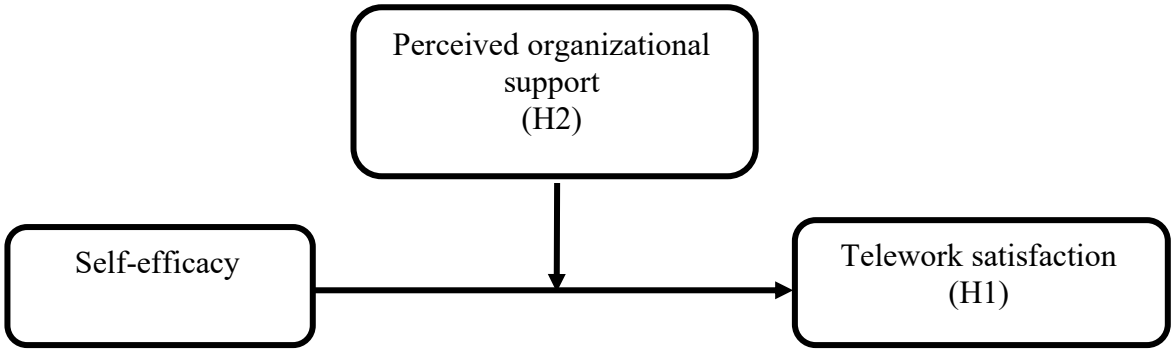

Figure 1. Study model, where self-efficacy is positively related to telework satisfaction (H1), and perceived organizational support as a moderator between self-efficacy and telework satisfaction relationship (H2).

Method

Participants and Procedure

From 158 respondents, 73 were male (46%) and 84 were female (53%). More than 50 percent of respondents (n = 88) did not have teleworking experience before the COVID-19 pandemic. The age of respondents varied from 22 to 61, with a mean age of 33.5 years. Nationality of the participants was categorized as five nationalities (e.g., Dutch, German, Canadian, Korean, and Other). From 158 participants, about thirty percent were Korean followed by Dutch (24%), Other, (19%), Canadian (16%), and German (11%). Participants' teleworking hours per week ranged from 8 hours to 70 hours, with average of 34.6 hours of teleworking per week. The organization tenure (employment years) ranged from 0 to 35 years (M = 3.8), 12 percent (n = 19) of participants having less than 1 year of working experience. A total of 25 respondents (16%) replied that they are currently living with children under the age of 18, which yields the potential of facing frequent interruptions when working from home (Kossek et al., 2006). The education level varied from primary school to doctorate

degree, with half of the respondents (n = 79) having a bachelor degree, followed by a master degree (n = 54).

Data were obtained through online survey. Convenience sampling was used to recruit participants. To qualify for the study, participants were required to provide their consent that they have agreed to participate in the survey. To gather relevant data regarding telework context, further access to the survey was given to those who work at least 3 days a week from home (or remote location) and those who are working at least 50% of their working time in a remote context (Gajendran & Harrison, 2007). Besides demographic variables, all the questions asked participants to think about teleworking context before answering the survey questions by providing additional information such as 'thoughts or behaviors regarding working from home (telework)'. Out of the 1.5-month data collection period, 353 responses were recorded via Qualtrics and 195 participants were removed who did not respond fully to the questionnaire, leaving the total number of 158 responses. Ethical approval was given by the ethical committee of the University of Groningen.

Measures

Self-efficacy. Self-efficacy was assessed with a Generalized Self-Efficacy scale (Schwarzer & Jerusalem, 1995), including 10 items on a 4-point Likert scale (1 = *Not at all true*; 4 = *Exactly true*). A sample item is, "I can usually handle whatever comes my way." Chronbach's alpha for this scale was .85.

Perceived organizational support. We used a shortened version of the Perceived Organizational Support scale developed by Eisenberger and his colleagues (1986). Perceived Organizational Support was assessed with 9 items on a 5-point Likert scale (1 = *Strongly disagree*; 5 = *Strongly agree*). A sample item is, "My organization is willing to extend itself in order to help me perform my job to the best of my ability." Chronbach's alpha for this scale was .90.

Job satisfaction. We used the Overall Job Satisfaction Scale developed by Brayfield and Rothe (1951) to measure telework satisfaction. To successfully measure employees' telework satisfaction, we asked participants to think about telework context when providing answers ("When thinking about working from home, to what extent do you agree with the following statements?"). Telework satisfaction was assessed with 18 items on a 5-point Liker scale (1 = *Strongly disagree*; 5 = *Strongly agree*). A sample item is, "I feel fairly well satisfied with my present job (working from home)." Chronbach's alpha for this scale was .90.

Control variables. We used two control variables: age and gender. We controlled for age because previous research indicates that age is positively associated with job satisfaction (Eskildsen et al., 2004). We controlled for gender because it was found that women may prefer teleworking and therefore, may be expected to exert greater effort in adjusting in teleworking context (Hill et al., 1998).

Results

Preliminary Analysis

Table 1 presents the descriptive statistics for the variables we used in this study. The correlation table suggests that employees' self-efficacy is positively correlated with telework satisfaction ($r = .25$, $p < .01$), which implies preliminary support for our first hypothesis. The control variable age was positively related to telework satisfaction ($r = .19$, $p < .05$), and gender was negatively related to self-efficacy ($r = -.16$, $p < .05$). Perceived organizational support was positively related to both self-efficacy ($r = .35$, $p < .01$) and telework satisfaction ($r = .56$, $p < .01$).

Hypothesis Testing

To test the main effect (H1), we used regression analysis. Concerning the moderating effect of perceived organizational support, we added the interaction term to the main effect. We conducted a hierarchical regression analysis to control for age and gender variables. In

order to avoid multi-collinearity by the interaction, we applied Aiken and West (1991) method, centered main effects to calculate the interaction term.

In the first step of hierarchical regression analysis, we entered age and gender as our control variables. The results (Table 2) showed that age was significantly associated with telework satisfaction, but gender was not significantly associated with our dependent variable. Our first hypothesis states that teleworkers' self-efficacy will be positively related to telework satisfaction. The hierarchical regression analysis (Table 2) suggests that the relationship between teleworkers' self-efficacy and telework satisfaction is positive ($\beta = .23$, $p < .01$), therefore supporting Hypothesis 1.

Our second hypothesis states that the relationship between self-efficacy and telework satisfaction would be moderated by perceived organizational support, such that the relationship is stronger as perceived organizational support increases. The result did not support our prediction (see Table 3). Specifically, the interaction was not significantly related to telework satisfaction ($\beta = .12$, $p > .05$). To further understand the meaning of the interaction, we applied the procedure recommended by Aiken and West (1991), performed a median split on the perceived organizational support variable, and plotted the interaction to check whether self-efficacious employees show greater telework satisfaction when perceived organizational support increases. Interestingly, there was a positive correlation for the high perceived organizational support group, indicating greater telework satisfaction for self-efficacious employees. However, for the low perceived organizational support group, there was a negative correlation between self-efficacy and telework satisfaction. Specifically, telework satisfaction gradually decreased for those who have higher self-efficacy when perceived organizational support was low. The result also shows that the highest telework satisfaction was achieved when self-efficacy and perceived organizational support were both

in high-level. Telework satisfaction was at the lowest for those who have high self-efficacy and low perceived organizational support.

Additional Analysis

Considering that employees are undergoing a rapid work transition due to COVID-19 (forced teleworking environment), we conducted an additional correlation analysis in order to check whether there is any difference between experienced teleworkers and non-experienced teleworkers. Both experienced teleworkers (n = 70) and non-experienced teleworkers (n = 88) indicated similar self-efficacy values (M = 3.25, SD = .43; M = 3.18, SD = .40). For experienced teleworkers, self-efficacy and perceived organizational support showed positive associations related to telework satisfaction (r = .30, p < .05; r = .52, p < .01). For non-experienced teleworkers, only perceived organizational support was positively related to telework satisfaction (r = .57, p < .01). The result implies that employees' teleworking experience may have an influence on the relationship between self-efficacy and telework satisfaction.

Table 1

Means, *SD*s, and intercorrelations of study variables

Variable	Mean	*SD*	1	2	3	4	5
Age	33.53	9.93	1				
Gender	1.55	.54	-.08	1			
SE	3.21	.42	.15	-.16*	1		
TS	3.57	.62	.19*	-.05	.25**	1	
POS	3.62	.74	-.01	-.06	.35**	.56**	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2
Hierarchical regression: Main effect

Variables	*β* (*SD*)	*t*
Age	.19*	2.35
Gender	-.03	-.43
SE	.23**	2.89
R^2 (adjusted)	.07	
F value	4.85**	
F change	$F_{(1,154)} = 8.36$**	

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Table 3
Hierarchical regression: Interaction effect

Variables	*β* (*SD*)	*t*
Age	.19*	2.35
Gender	-.03	-.43
SE	.04	.51
POS	.55**	7.88
SE ∗ POS	.12	1.82
R^2 (adjusted)	.34	
F value	17.39**	
F change	$F_{(3,152)} = 26.05$**	

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Discussion

The aim of this paper was to investigate the relationship between self-efficacy and telework satisfaction and explore whether this relationship is moderated by perceived organizational support. The present study assumed that employees' self-efficacy will be positively related to telework satisfaction. Consistent with our expectations, there was a

positive association between self-efficacy and telework satisfaction. The study also argued that perceived organizational support will moderate the relationship between self-efficacy and telework satisfaction, such that the relationship is stronger as perceived organizational support increases. Unexpectedly, we did not observe a significant interaction effect in our study. However, our results draw attention to the importance of employees' beliefs, which is increasingly important in events such as the COVID-19 pandemic where employees are forced to work from home and expected to adapt quickly to new ways of working. The findings of this study have important implications for both research and practice.

Theoretical Implications of the Study

Results from the present study support and expand research on teleworking, by suggesting the importance of employees' self-efficacy. Previous research indicated the advantages of self-efficacy in adjustment to remote working (Raghuram et al., 2003; Saks, 1995). The present study also demonstrates that self-efficacy is a crucial personal resource that explains positive outcomes when working from home, especially in the periods of enforced lockdown due to the COVID-19 pandemic. The findings of this study could be explained by the social cognitive theory, which suggests that self-efficacy helps individuals to invest efforts to meet their work-related tasks and challenges and therefore, make them feel more satisfied with their job (Bandura, 1997; 2004). In line with the theoretical explanation, our result is consistent with the recent research, which demonstrates that individuals with stronger belief in their skills and abilities are more likely to achieve higher level of job satisfaction (Klassen et al., 2010).

Additionally, this study also brings general self-efficacy into focus in the teleworking condition. Previous studies on self-efficacy in telework environment neglected the surrounding factors that may influence individual functioning, and only focused on task-specific self-efficacy (e.g., Staples et al., 1999; Raghuram et al., 2003). However, we need to

consider that for high-intensity teleworkers, work-family demands can always coexist, interfering with one's performance, and leaving work in a less task-specific manner (Raghuram & Wiesenfeld, 2004). Golden and Veigar (2005) also suggested that various factors should be considered for high-intensity teleworkers. In their study, they found that the extent of teleworking increases job satisfaction to a certain point, but tapers slightly as the number of teleworking hours continue to increase. They argued that the negative impact of increased feeling of isolation and decreased social interactions may negatively affect job satisfaction, as individuals telework more extensively (Pool, 1990; Yap & Tng, 1990). Moreover, at the time of conducting the present research, government regulations and lockdowns were taking place due to the COVID-19 pandemic. Employees spend most of their time working from home. In this regard, we decided to measure self-efficacy in a broad and generalized way rather than task-specific or one single domain, since work-family life always coexists. Our result contributes to the findings that general self-efficacy may be an appropriate variable to investigate in determining telework satisfaction, especially for high-intensity teleworkers.

Despite having no significant interaction of self-efficacy and perceived organizational support in our study, an interesting finding emerged related to the perceived organizational support variable. When perceived organizational support was added as a moderator in the self-efficacy and telework satisfaction relationship, the self-efficacy variable no longer indicated a significant effect on our dependent variable (telework satisfaction). The results of the interaction effect in our regression analysis indicated that only the perceived organizational support variable was found to be significant with our dependent variable.

One possible explanation for such results could be found in the optimal matching model of stress and coping (Cutrona & Russell, 1990). According to the optimal matching model, coping strategies result in positive outcomes only when there is a match between the

demands of stressors and the functions of coping strategies. The optimal matching model also suggests that for uncontrollable events, emotional support and the support function which fit with the specific domain leads to positive outcomes. In this regard, a forced teleworking environment can be viewed as uncontrollable events to employees, which can be interpreted as demands of stressors. Since perceived organizational support provides socioemotional support and allows employees to remain task-focused and more engaged in telework (Eisenberger et al., 1986; Kose, 2016), we can expect that employees viewed perceived organizational support as a successful coping strategy that matched the demands of stressors (forced teleworking environment) rather than self-efficacy. In other words, the positive association between perceived organizational support and telework satisfaction may be a result of selecting a successful coping strategy in a forced teleworking condition. Nevertheless, plotted interaction indicated the highest telework satisfaction when self-efficacy and perceived organizational support were both at a high level. Thus, it would be premature to neglect employees' self-efficacy when considering telework satisfaction, since the presence of both individual and contextual helping factors is the most optimal when it comes to telework satisfaction.

Practical Implication

The results of this study offer several implications for both organization and management. Since the relationship between self-efficacy and telework satisfaction is promising, it would be important for organizations to put effort in increasing employees' self-efficacy in return for positive outcomes. Self-efficacy can be enhanced through training interventions (Gist & Mitchell, 1992). Gist and Mitchell (1992) suggested that employees' self-efficacy can be enhanced by providing information that gives a thorough understanding of the work environment and task attributes. In this view, training designed to provide task knowledge that is related to the telework context may improve individuals' personal resources,

which can be utilized as employees' abilities to organize and execute courses of action that are needed in teleworking condition (Bandura, 1986). For example, explaining the nature of the teleworking environment and how structuring behavior can be effective in such an ambiguous and vague context, developing proper communication channels in order to avoid the absence of interaction between colleagues and supervisors, and providing sufficient training to get familiar with new work-related software can all be considered as a way to enhance employees' self-efficacy (Staples et al., 1999).

Another way to increase self-efficacy can be achieved through stimulating potential teleworking experiences by modeling (Mahler et al., 1993). Bandura (1978) suggested that individuals may generate expectations that they can improve their performance by learning from observation. Observation of others is found to provide knowledge of skills, abilities, and motivational components, which gives information on successful strategies that the task requires (Kanfer & Ackerman, 1989). In this perspective, workshops conducted by experienced teleworkers may be beneficial to employees in increasing self-efficacy. For instance, workshops that address the issue of telework-related obstacles and how to overcome such difficulties, and provide coping strategies in order to minimize work-family interference can derive employees' expectations that they can successfully perform telework. Thus, with such interventions, we can expect that employees will show greater self-efficacy on telework.

Other mechanisms to achieve positive outcomes related to teleworking are by making employees feel that they are supported by the organizations. As it is expected that employees who work from home will be sharing their work space with family members, it seems inevitable that high-intensity teleworkers encounter work-family conflict (Kossek et al., 2009). In other words, an organizational approach that is designed to reduce work-family conflict can yield increased performance and well-being for teleworkers. According to Lautsch (2009), organizational support such as supervisors' coaching to arrange separation between work and

family demands was found to reduce work-family conflict. Moreover, boundary management strategies recommending the separation of work-family life were found to be a predictor of individual well-being among teleworkers (Kossek et al., 2006). Technological support, computer training (e.g., in order to get familiar with work-related software), and mentoring programs by experienced teleworkers may be additional ways to increase perceived organizational support as well as telework satisfaction (Staples et al., 1999).

Limitations, Strengths, and Direction for Future Research

As with any other research, this study has several limitations. One such limitation is the relatively low response rate (45%) that we have received. Although our analysis may indicate that the sample represents the population from which is drawn, a higher sample size would have made our results more robust. Additionally, our study is limited by a cross-sectional design, which means that causation cannot be drawn from the relationship between the variables. Thus, increasing the participation rate with a longitudinal research design may produce more promising results.

Another limitation can be found in a forced teleworking environment. Our data collection happened during the time of strict lockdowns and regulations taking place due to the COVID-19 pandemic. In other words, employees experienced a rapid transition of the working environments. In fact, more than 50 percent of our respondents (n = 88) did not have teleworking experience beforehand. Raghuram and his colleagues (2003) have found that teleworking experience is positively related to adjustment, which implies that employees' adjustment to teleworking may be the output of a long-term learning process that is related to the teleworking experience. In this perspective, we can assume that more than half of our participants would have relatively low adjustment compared to experienced teleworkers.

The low adjustment level may have influenced our interaction result. For example, employees who have no experience in teleworking may be seeking organizational support

rather than having belief in their own skills and abilities. Because they are still adjusting to the telework context, they will find organizational support more helpful compared to their own self-efficacy beliefs. Preliminary support for our assumption that a low adjustment level may have affected our interaction result can be found in correlation analysis. Similar mean values of self-efficacy were observed in both groups, suggesting that there is no huge difference in self-efficacy. For those who have teleworking experiences, self-efficacy and perceived organizational support were both positively related to telework satisfaction. However, for those who did not have teleworking experiences, only perceived organizational support and telework satisfaction indicated a significant positive relationship. With this respect, we can carefully assume that more than half of our participants subconsciously have the idea that belief in skills and abilities is not helpful enough in determining their satisfaction. This may have influenced our moderation effect, as well as the explanation for the self-efficacy variable stops being significant when perceived organizational support was added to the study model. An interesting avenue for future research may be including teleworking experience in the study model, in order to examine whether teleworking experience is associated with employees' self-efficacy and perceived organizational support. Moreover, it would be interesting to repeat the study in a few years when teleworking is more wide-spread and employees have more experience.

The strength of our study is that the influence of self-efficacy was measured in the natural disaster setting. Indeed, this study adds more explanatory power to the relationship between self-efficacy and job satisfaction, considering the fact that the result was derived while individuals experienced a natural disaster. Moreover, the result of our study is consistent with the findings that self-efficacious employees may be able to manage existing resources more effectively, reducing psychological distress (Benight et al., 1997). Due to the outbreak of COVID-19, employees experienced inevitable resource losses regarding their

work. Such experience may include lack of office supplies, absence of communication with colleagues and supervisors, poorly installed workstations at home, and insufficient organizational support (e.g., receiving not enough feedback or advice from supervisors). In addition, we can assume that employees may face work-family interference more frequently compared to previous working conditions, because severe lockdowns and regulations took place during the time of our data collection, leaving no place to work but home (Kossek et al., 2009). Despite such circumstances, the positive association between self-efficacy and telework satisfaction demonstrates that self-efficacious employees not only have a higher belief in their skills and abilities but also a strong sense of environmental control that contributes to the effective management of available resources (Hobfoll, 1989). Since it will be almost impossible to replicate the natural disaster setting, an interesting avenue for future research may be testing the association between self-efficacy and job satisfaction when employees are undergoing unexpected work transitions.

Conclusion

In conclusion, this study contributes to unfolding the relationship between individual belief and telework satisfaction. In addition, we included perceived organizational support as our moderator in order to observe the interaction effect in such a relationship. The result of our study reveals that employees' self-efficacy is positively associated with telework satisfaction. Although the moderating effect was found to be insignificant, our result suggests that the highest telework satisfaction can be achieved by increasing employees' self-efficacy and perceived organizational support. Thus, it will be important for organizations to make the best of self-efficacy intervention as well as provide enough support if they want to achieve the utmost benefit from telework. Future research is needed to investigate our study model in different contexts and to draw causal inferences by adopting longitudinal designs.

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