The effect of teleworking implementation on work engagement: Job resources as a mediator

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ABSTRACT: This study seeks to determine the effect of the implementation of teleworking on work engagement. The hypothesis is that job resources' motivational process (i.e., job autonomy and job variety) can mediate that effect. The data were collected from 271 employees of various state-owned companies in Indonesia. This study employed quantitative research using scaling for data collection and the structural equation model (SEM) to test the data. This study found that (1) the implementation of teleworking does not have a significant effect on working engagement and (2) job resources act as a mediator between the implementation of teleworking and work engagement.

1 INTRODUCTION

The COVID-19 pandemic that began in the beginning of 2020 has caused unprecedented changes in the global economy and the professional world (International Labour Organization, 2020). To curb the disease's spread, the government urged to maintain distance, prohibit gatherings and meetings, and limit out-of-house activities. Many companies have issued work from home (WFH) policies and switched to the teleworking system to respond to this situation. Hence, teleworking has become increasingly common in the pandemic situation and is considered an important aspect of ensuring business continuity. Teleworking has some benefits, such as reducing travel time and distractions, increasing workers' focus on their duties, providing a better work-life balance, and making schedules and workspace more flexible. However, some drawbacks, such as the feeling of isolation (especially for employees who live alone) and loss of contact with fellow employees (International Labor Organization, 2020), are indicated in teleworking implementation.

Previous research conducted by Sardeshmukh, Sharma, and Golden (2012) shows that teleworking has a negative relationship with work engagement. Employees who do teleworking tend to be physically and psychologically separated from the workplace, find it difficult to identify with the company, and consider themselves more independent. The research shows that extensive teleworking can reduce work engagement. The research also includes the motivational process from job resources (i.e., job autonomy and job variety) as mediation for the teleworking effect on work engagement. As teleworking changes, the way employees carry out their work physically and cognitively, the job resources, an important aspect for work and individual goals, and individual work engagement are also affected.

This study seeks to determine the effect of teleworking implementation on work engagement. Particularly, the present study hypothesizes that job resources (i.e., job autonomy and job variety) mediate the effect of teleworking on work engagement. Therefore, the hypotheses in this study are as follows:

Hypothesis 1: Teleworking has a negative and significant effect on working engagement.

Hypothesis 2: Job resources mediate the effect of teleworking on work engagement.

2 LITERATURE REVIEW

Teleworking generally utilizes information and communication technology (ICT), such as smart-phones, tablets, laptops, or computers, to support work activities carried out in places far from traditional office environments (International Labor Organization, 2017). The positive and negative impacts of the teleworking work system can be measured by evaluating aspects such as remote working satisfaction, family and professional conflicts, the use of communication tools and technology, task efficacy, commitment to the company, work–life balance, relationships with colleagues, stress management, and work concentration (Baert, Lippens, Moens, Sterkens, & Weytjens, 2020).

Work engagement is defined as the process where the organizational members express themselves physically, cognitively, and emotionally when doing jobs (Kahn, 1990). Bakker and Demerouti (2008) define work engagement as a positive, full, and affective employee mind state associated with performing work roles characterized by three aspects: vigor, dedication, and absorption.

Job resources are a motivational process generated from a job demands–resources (JD-R) model (Bakker & Demerouti, 2006). Job resources consist of physical, psychological, social, or organizational aspects of work essentials to achieve work goals, reduce physiological or psychological costs, or stimulate growth, learning, and personal development (Schaufeli & Bakker, 2004). Van de Voorde, Veld, and van Veldhoven (2016) suggest that job resources have two dimensions: job variety and job autonomy. Job variety reflects the extent to which a job offers a series of tasks that use plenty of skills and require creativity and personal input (Grant & Ashford, 2008). Job autonomy is defined according to the extent to which the job provides substantial freedom, independence, and discretion to individuals in scheduling work and determining the procedures used in carrying out the work (Hackman and Oldham, 1976).

3 RESEARCH METHODS

3.1 *Types and data sources*

This study is quantitative research. This study employed a census-based survey using a questionnaire distributed to employees using teleworking to work during the COVID-19 pandemic from various state-owned enterprises in Indonesia. Out of this study's 271 participants, 71.2% were men and 28.2% were women. In terms of marital status, 67.5% were married and 22.5% were single. Most of the participants (31.7%) were 26–30 years old.

3.2 *Measures*

The teleworking effect was measured by 14 items adapted from Baert, Lippens, Moens, Sterkens, and Weytjens (2020). The items include “I am globally satisfied that I am working more at home because of the corona crisis” and “I can do my job more efficiently during the extended homework because of the corona crisis.” The respondents indicated the extent to which they agreed with each statement on a five-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach's alpha coefficient of the teleworking is 0.78.

Job resources (i.e., job autonomy and job variety) were measured by eight items adapted from Van de Voorde, Veld, and van Veldhoven (2016). The items include “Does your work require creativity?” and “o you have freedom in carrying out your work activities?”. The respondents' answers were indicated on a four-point scale, ranging from 1 (never) to 4 (always). The Cronbach's alpha coefficient of the job resources is 0.60.

Work engagement was measured by 17 items adapted from the UWES (Utrecht Work Engagement Scale) (Schaufeli, Backer, & Salanova, 2006). The items include “At my work, I feel bursting with energy” and “I find the work that I do full of meaning and purpose.” The respondents indicated their answers on a seven-point scale, ranging from 0 (never) to 6 (always). The Cronbach's alpha coefficient of the UWES is 0.97.

3.3 Data analysis

The analysis was carried out with the Lisrel 8.8 program. This study assessed the properties of the scales by estimating a confirmatory factor analysis (CFA) model. The resulting purified scales were then used for simultaneous estimation of the structural model for testing the hypotheses. The confirmatory factor analysis (CFA) test shows that all indicators of each variable in this study are valid, as they have a standardized factor loading (SFL) value greater than 0.5. The reliability test using the construct reliability (CR) found that in each variable, the CR value was greater than 0.7 and the average variance extracted (AVE) value was greater than 0.5.

Structural equation modeling (SEM), as implemented in Lisrel 8.8, was used to test structural models by using maximum likelihood analysis. The resulting model produced good fit indices (e.g., chi-square = 591.20, d.f. = 222, comparative fit index (CFI) = 0.93, and root mean square error of approximation (RMSEA) = 0.78), indicating a good fit.

4 RESULTS

This study examines the direct effect of teleworking on work engagement and whether job resources mediate the effect. The findings indicate that teleworking's direct effect on work engagement is rejected, but the indirect effect of teleworking on work engagement through job resources is accepted. Teleworking implementation has a negative and insignificant effect on work engagement because the t-values are below 1.64 (SLF = -0.03; t-values = -0.60); thus, H1 is rejected. Then, when the researchers include the motivational process from job resources as a mediator, the results show that job resources mediate the effect of teleworking on work engagement, providing support to H2. Specifically, teleworking implementation has a positive effect on job autonomy and job variety (SLF = 0.31; t-values = 4.22), and changes in those job resources positively impact work engagement on the dimensions such as vigor, dedication, and absorption (SLF = 0.18; t-values = 2.14). Van de Voorde, Veld, and van Veldhoven (2016) suggest that job resource aspects, such as job variety, can positively increase employee work engagement. These results are consistent with those of previous studies, indicating that teleworking's effect on work engagement is mediated by job resources (Sardeshmukh, Sharma, & Golden, 2012). In this study, job resources fully mediate the influence of teleworking on work engagement.

The current teleworking implementation on employees from various state-owned enterprises in Indonesia is a policy enforced abruptly due to the COVID-19 pandemic. The application requires strong employee management and use of technology. The shift from work from the office to a work from home system accommodated by teleworking will change how, when, and where employees work. However, some companies are not familiar with remote employee management and do not have high technology and information systems to implement teleworking; thus, companies have to make significant practical adjustments to maintain work engagement.

5 CONCLUSIONS AND SUGGESTIONS

In summary, this study provides further evidence that teleworking has a negative but insignificant effect on work engagement and that job resources can mediate this effect.

This study has significant managerial implications. The results imply that to implement teleworking successfully, managers should make an effective teleworking work system management strategy that encourages employees to give their best performance when working remotely. Also, managers should increase job resources for employees to do teleworking by providing various jobs that require multiple skills, holding training or skills development, and giving authority to employees doing the tasks.

The limitation of this study is that several questionnaire items were invalid on the teleworking variable. Besides, data retrieval and processing only use quantitative methods, limiting the exploration of the companies' actual specific conditions.

Therefore, future research should use other descriptive measuring tools to measure the teleworking effect on work agreements. The use of teleworking by employees may occur in the long term; thus, the impact that results from employee hard work needs to be investigated.

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