

A Review of Research on Work Connectivity in Non Working Hours

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Abstract

With the development of the times, it is becoming more and more common for people to deal with work in non working hours such as after work. Based on the research literature in this field, this study focuses on the concept, measurement and impact effect of work connectivity behavior in non working hours, and looks forward to the future research direction.

Keywords

Work Connectivity; Non Working Hour.

1. Introduction

With the development of network and communication technology and the popularity of smart terminals such as mobile phone and computer, new working methods such as online telecommuting have been popular. Especially by the impact of COVID-19 epidemic in early 2020, online office has been developing rapidly. According to iimedia research, during the resumption of work in February 2020, more than 18 million enterprises in China adopted online telecommuting mode, and a total of more than 300 million people used online office applications. According to the 2020 modern family index recently reported by the BBC, 44% of parents need to work overtime at home at night, including checking work email. While technology development brings convenience to people's work and life, it also enables employees to remain "online" during non working hours outside the workplace, such as answering emails after work, weekends and even holidays [1]. This phenomenon leads to the blurring of the boundary between employees' life and work, which makes employees still have to deal with work tasks during personal rest time, which is not conducive to employees' psychological separation [2], and is prone to negative effects such as emotional exhaustion [3]. Work connectivity in non working hours refers to a series of behaviors of employees using portable wireless communication devices to participate in work or contact colleagues during non working hours [4, 5]. Different from telecommuting or mobile office, work connectivity behavior in non working hours has the following characteristics: (a) it occurs in non working hours (usually including morning and evening time before and after work, weekends and holidays); (b) Occurs outside the regular workplace; (c) Support of portable wireless communication equipment; (d) Handle work-related affairs; (e) There are differences in connotation between active connection and passive connection, such as actively contacting colleagues to obtain work help or temporarily assigned work tasks by leaders; (f) With the nature of additional or supplementary work, they often can not get the corresponding remuneration [6, 7].

2. Dimension and Measurement of Work Connectivity in Non Working Hours

For the measurement of working connectivity in non working hours, existing studies mainly measure it from two dimensions: frequency and duration.

2.1. Frequency Dimension

For the working connection frequency during non working hours, the frequency of subjects using mobile phones, computers, mailboxes and other communication devices during non working hours is mainly measured [1, 8, 9]. Meanwhile, Richardson & benbunan fich [4], based on the measurement method of Boswell & Olson Buchanan [1], further improved the reliability and validity of the scale by asking subjects about the frequency of use of specific equipment in specific non working time situations.

2.2. Duration Dimension

Adkins et al. [10] based on the scale developed by Richardson & Thompson [11], asked the subjects how long they used smart phones, mobile phones, laptops and desktop computers during non working hours (before, after work and non working hours). Combined with the Likert scale, they coded the duration, which were "0", "1-30 minutes", "31-60 minutes" respectively "61-90 minutes", "91-120 minutes" and "more than 2 hours". Based on the same scale, Chinese scholar Ma Hongyu et al. found that the subjects would confuse the definitions of "before work" and "after work" in the early interview [4]. Therefore, the evaluation of "before work" work connectivity in the original scale was deleted and replaced by calculating "lunch break" The occurrence degree of work connectivity behavior in non working hours is evaluated by the duration of work connectivity behavior in the three time periods of "after work" and "holidays".

2.3. Frequency and Duration Dimensions

The measurement of non working time work connectivity behavior through the two dimensions of frequency and duration has been recognized by most researchers. Mainly based on the scale developed by Richardson & Thompson [11]: in terms of frequency, measure the frequency of using mobile devices (such as mobile phones, computers, etc.) in a specific non working time; In terms of duration, subjects were asked about the time spent performing their duties on mobile devices during non working hours such as before work, after work and holidays [2, 12, 13].

3. Research on Work Connectivity in Non Working Hours

3.1. Positive Impact

The research results of Dirks et al. [14] found that for individuals who prefer work family integration, work-related mobile phone use during non working hours enhances employees' family role performance by reducing work family conflict. The possible reason is that for individuals with integrated preferences, work-related mobile phone use after work may meet both work and family requirements, so in this case, it will reduce individual work family conflict and improve their family role performance. Zhang Lanxia et al. [9] found that when employees regard non working time work connectivity behavior as work resources, non working time work connectivity behavior will have a positive impact on employees' creativity through the chain intermediary of psychological attachment and work family gain. Secondly, although previous studies have found that non working hours work connectivity behavior is not conducive to employees' psychological disengagement, ohly & Latour [15] found that non working hours work-related mobile phone use has a positive impact on employees' psychological disengagement, The reason may be that the low frequency of work-related mobile phone use during non working hours may help employees complete their work tasks in time, which is conducive to psychological disengagement. In addition, the flexibility and convenience brought by technology can help improve the employees who moderately participate in the work connection during non working hours and improve their work input [16, 17], thus contributing to the improvement of work performance.

3.2. Negative Impact

From a personal perspective, employees in non working hours need to misappropriate the time and energy originally used in non working areas to deal with work affairs. They can't "separate" from work physically or psychologically, and need to switch seamlessly between family roles and work roles frequently, further causing the loss of resources. In this process, it is easy for individuals to have negative emotional experience related to work, produce high-level emotional exhaustion experience, affect employees' sleep and rest, not only affect employees' resource recovery [18], but also cause exhaustion in the morning of the next day [19]. If there is no effective and timely replenishment of resources, it will further affect the performance of employees in the field of work. Long term and high-frequency non working time work connectivity is easy to reduce employees' initiative behavior [19], produce a sense of job alienation [20], cause job burnout [21], and improve employees' turnover intention [22].

From the perspective of the impact of work on the family field, the work connectivity behavior in non working hours blurs the boundary between work and family, and forces employees to allocate family role related resources for work needs, which is not conducive to employees' psychological separation, but also hinders the satisfaction of family role needs, resulting in role conflict, Further lead to work life conflict [1, 21, 24] and work family conflict [2, 4, 11, 12, 23], and reduce employees' work family satisfaction [13].

3.3. "Double Edged Sword" Effect

The use of work-related communication technology in non working hours enables employees to deal with work-related affairs without being limited by working hours and workplace. The flexibility and convenience brought by technology improves employees' work efficiency, productivity and work control. While increasing employees' work investment and job satisfaction, It will also lead to high-level work life conflict and job burnout, and work life conflict will have an adverse impact on employees' job satisfaction [16, 24]. Secondly, different motives to participate in work communication in non working hours will also bring different effects. For example, the use of mobile phones in non working hours driven by internal motivation will bring positive emotional experience to employees, which is conducive to psychological disengagement and recovery, so as to improve their sense of happiness; Employees who passively use mobile phones during non working hours driven by controlled motivation will experience negative emotions, which will reduce employees' happiness [15].

3.4. Nonlinear Effect

The impact of non working time work connectivity on work life balance [25] and work family gain [26] shows an inverted U-shaped relationship. For the work life balance of employees, work connectivity in non working hours provides employees with the opportunity to rearrange priorities and resource allocation between work and non work. Appropriate work connectivity after work brings the best work life balance. The low level of work connectivity behavior in non working hours will make employees unable to experience the flexibility and convenience brought by technology and the sense of work achievement, which is not conducive to the improvement of work life balance; The high-intensity work connectivity will force employees to invest too much personal resources in their work, affecting the time and energy that should be used in non work areas, resulting in the reduction of work life balance. For the work family gain of employees, the work connectivity behavior in non working hours provides employees with the opportunity to play a work role in the family field. At this time, the positive experience and resource income obtained by employees at work help to overflow the family field and promote work family gain; However, excessive work connectivity behavior prolongs employees' working hours. As a source of stress, it leads employees to work exhaustion,

reduces the allocation of relevant time and energy in the family field, and reduces the gain of work family.

4. Review of Research on Work Connectivity in Non Working Hours

Generally speaking, with the continuous development of information technology, the research on work connectivity behavior in non working hours has attracted more and more scholars at home and abroad. Firstly, the existing research has paid more attention to the negative effects of work connectivity behavior in non working hours, but some studies have found that work connectivity behavior in non working hours can also have a positive impact. However, the exploration of its positive effects has not received extensive attention, which is not conducive to a comprehensive and in-depth understanding of non working time work connectivity behavior. Secondly, the existing research mainly focuses on the field of work and family. Little is known about how non working time work connectivity affects employees' behavior in the workplace, which can not fully reveal the impact of non working time work connectivity in different fields. Finally, variables such as psychological disengagement and emotional exhaustion have been widely recognized as the action mechanism of non working time work connectivity behavior, but other possible variables have not been effectively explored, which can not reveal the action mechanism of non working time work connectivity behavior in different situations.

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