

## What Factors Influence on the Work/Non-Work Interferences in the Context of Smart Work

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**Abstract.** Despite its emphasis on the work and life balance, Smart Work is expected to make the boundaries between work and non-work blur and role conflicts occur more than before, and thus work and life balance more at distance. In this paper, drawing on the boundary theory, we empirically investigated structures and factors affecting the interferences at work and non-work which should be reduced for the work and life balance. Job autonomy and boundary strength were found to have impacts on the interferences, and role identification and permeability were shown to affect the interferences mediated by the boundary strength.

**Keywords:** Smart Work, Interference, Boundary Strength, Job Autonomy, Permeability, Identification

### 1 Introduction

Smart Work can be regarded as an extended version of telecommuting or distance work and can be defined as “working efficiently and conveniently regardless of time and place utilizing ICTs”. In Korea, various types of Smart Work are attempted to make working time and place flexible. As it is possible to work and/or enjoy personal lives anytime and anywhere beyond time and place constraints, research on the blurring boundaries between work and non-work attracts growing attention. Positive and negative appraisals coexist to the blurred boundaries between work and non-work [1]. From the positive perspective, it is emphasized that workers are able to flexibly control their work as well as non-work and their potential is fully utilized. As is opposed to the positive perspective, workers may experience interferences and they cannot focus either on work or family.

In the context of Smart Work, despite its emphasis on work and life balance, it is expected the boundaries between work and non-work would blur and role conflicts would occur more than before because workers can work where and when they played other roles than as a worker, and can spend time not working where and when they conventionally worked. As a result work/non-work interferences may increase.

To find ways to enhance work and life balance, especially in the context of Smart Work, factors having effects on the work/non-work interferences and their relationships should be firstly investigated.

We investigated the interferences as related with boundary strength, one of the core concepts of boundary theory and job autonomy. Workers build a psychological boundary between work and non-work, determine the strength of it, actively reduce interferences [2], and manage them individually with job autonomy [3]. Directionalities of interferences as well as the sources of them need to be considered [4, 5]. In this paper, drawing on the boundary theory, we empirically investigate the role of work/non-work boundary strength and job autonomy on the work/non-work interferences.

## 2 Boundary Theory

Boundary theory started from the interests in enhancing work performance by appropriately managing the diverse roles an individual could play. Early researchers focused on the negative effects caused by managing multi roles [6]. Especially conflicts between work and family roles are known to cause decrease in job satisfaction [7], decrease in life satisfaction [8], withdrawal from work [9], and depression [10].

However, it is suggested that multi roles can be also appropriately managed by active organization of diverse roles. Hall & Richter [11] addressed the idea of “active organization of diverse roles” and insisted workers balanced work and non-work with the method of active organization of permeable boundaries. Nippert-Eng [12], in a follow-up study, contributed to the boundary theory by observing the ways an individual negotiated with diverse domains. Especially it is emphasized that workers create work/non-work boundary by intended segmentation and integration. Ashforth *et al.* [2] expanded the boundary theory to other domains beyond work/non-work, suggesting the concept of role transition.

People do not stay only in one domain, but perform activities crossing various domains. Boundary can be built thin (weak) or thick (strong). Thin and weak boundary is “permeable” and likely to “integrate” several separate domains. But thick and strong boundary is “non-permeable” and apt to “segment” the domains [2]. Expanding the boundaries and crossing the boundaries of different domains can occur in either thin or thick boundaries. Clark [13] asserted that individuals built boundaries with different strength around each respective domain. Developing the idea of Clark [13], Ashforth *et al.* [2] proposed that individuals had different preferences of boundary strength to different domains. To summarize, strong boundary is built to maintain segmentation and weak boundary is constructed to facilitate interaction across the boundaries [2, 13].

### **3 Research Model and Hypotheses**

Work and non-work domains are separated to make each model. In a work domain, boundary strength at work and autonomy are main factors decreasing non-work to work interferences. Boundary strength at work is weakened by non-work to work permeability, positively influenced by work role identification, and mediates the effects of them to decrease non-work to work interferences. In a non-work domain, both boundary strength at non-work and autonomy have negative effects on the work to non-work interferences. Boundary strength at non-work is influenced by non-work role identification (positive) and work to non-work permeability (negative), mediates the effects of them to decrease work to non-work interferences.

### **4 Research Method and Results**

Research subjects are the users of Smart Work. It is necessary to take proper samples to investigate the role of boundary strength and autonomy on the work/non-work interferences. Smart Work users in company A in Korea is selected where Smart Work is adopted and used from 2010.

Questionnaires were developed to measure 9 constructs used in the hypotheses. All of the survey items were chosen from the previous research where reliability and validities were verified, and slightly modified pertinent to the research context. All the items were measured on a 7 point Likert scale. 286 surveys were put into analysis, except those with many missing responses and patterned responses. Demographic characteristics of the respondents were similar to those of whole employees of company A.

All hypotheses were accepted except the one that hypothesized the positive effects of non-work role identification on the boundary strength at non-work. In the work domain, job autonomy and boundary strength at work negatively impact non-work to work interference and work role identification and non-work to work permeability negatively effects boundary strength at work. Thus, the result signifies that job autonomy and boundary strength at work lessen interferences at work. In the non-work domain, job autonomy and boundary strength at non-work also have impacts on work to non-work interference, but non-work role identification does not have effects on the boundary strength at non-work. This shows even if he/she has high non-work role, it does not affect to reinforce boundary strength at non-work. Further, this could imply generally lower level of boundary strength at non-work.

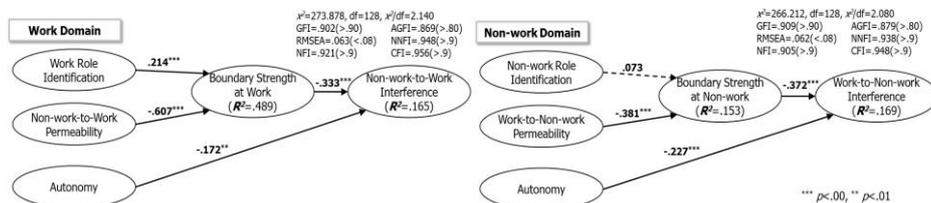


Fig. 1. Research Result

## 5 Conclusions and Implications

This study aims at exploring the structure and factors which could reduce the interferences between work and non-work in the Smart Work context. Considering the bi-directional nature of work and non-work boundary permeability, we set up a research model and empirically verified work/non-work boundary strengths and job autonomy played a significant role in reducing work/non-work interferences. In the course, the mediating role of boundary strength, which was affected by role identification and permeability, was also found.

Smart Work environment presumes blurred, more permeable boundaries and weak boundary strengths of any roles, and constructing strong boundaries is not a plausible solution to escape from interferences in this environment. Change management in boundary setting by individuals should follow for the successful implementation of Smart Work.

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