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The Influence of Management's Work-Life Balance
on the Organizational Behavior of Employees
in Small and Medium-sized Enterprises
—Empirical Analysis Focusing on Spillover and Crossover Effects—

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The Influence of Management's Work-Life Balance on the Organizational Behavior of
Employees in Small and Medium-sized Enterprises
—Empirical Analysis Focusing on Spillover and Crossover Effects—

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Abstract

This study investigates the crossover effect of work-life balance (WLB) in the relationship between the management of small and medium-sized enterprises (SMEs) and their employees. SMEs are smaller in scale and have fewer employees than large enterprises, resulting in a close relationship between management and employees. In SMEs, it is easier for employees to observe the daily behavior of the management. Therefore, if management's WLB satisfaction is high, the positive attitude of the management will be transmitted to the employees, and it is thought that this will improve employee WLB satisfaction and motivation. In this study, business managers (90 people) in Osaka Prefecture and the matched data of employees (1,054 people) were used for analysis. The results showed that the management's WLB satisfaction level had an influence on the degree of work engagement of both male and female employees. However, a crossover effect between management and employees' WLB satisfaction while observed in men, was not observed in women. It is suggested that the fixed ideas and paternalism of male management toward female employees may work to suppress the crossover effect on women.

Keywords: work-life balance (WLB); spillover effect; crossover effect; work engagement; small and medium-sized enterprises (SMEs)

1 . Introduction

Work-life balance (WLB) is actively being discussed as an important policy issue involving achieving gender equality in society. In the background, there is the rapidly declining birth rate and rapid aging of the Japanese society, and a societal need for women in the workforce. In this study, knowledge of WLB that contributes to the success of women in the workplace will be examined, focusing on the perspective of the crossover

between management and employees, as well as the spillover effect from work into private life. In particular, the relationship between management and employees in small and medium-sized enterprises (SMEs) was focused on, and the effects of management's WLB satisfaction on employee work engagement, as well as a gender comparison of WLB satisfaction effects on background, was examined.

2. Spillover of Work and Private Life and the Crossover of Managers and Employees

Considering past academic research on balancing work and home, in America, since the 1980s, research on Work-Family Conflict (WFC) has been pursued actively in psychology, sociology, and business administration. WFC, in terms of work and household roles, depicts a situation where fulfilling one role leads to the other role not being sufficiently fulfilled. In psychology, WFC is regarded as a form of role conflict, and its determinants and effects on stress have been analyzed (Greenhaus and Beutell, 1985).

However, moving into the 2000s, WFC as a confrontation between work and family was not a viewpoint that was considered, and many researchers examined WFC from the perspective that the relationship between work and family could be one of mutual benefit (Greenhaus and Powell, 2006). The central tenet is that of a positive spillover. Poelmans, Stepanova, and Masuda (2008) present concepts that capture the positive relationship between work and family such as positive spillover, work-family enrichment, and work-family facilitation. Spillover involves the flow, from one role to another, of experiences relating to feelings, skills, values, etc.

The premises of positive spillover research are that it 1) uses individuals as units of analysis, 2) divides into two directions of "flow from work to family" and "flow from family to work," and 3) considers the influences of behaviors and characteristics of both work and family from the aspects of the instrumental and the affective. The instrumental aspect refers to cases where skills and abilities acquired from work (private life) are applied to private life (work). The affective aspect refers to cases where feelings and emotions (joy, sense of fulfillment, etc.) from work (private life) are transferred to private life (work). From the perspective of positive spillover, the challenges made by human resource management are to take into consideration life outside of work, in order to raise the WLB satisfaction

levels of employees.

On the other hand, in recent years, there has been a focus on crossover in the influences of managers on their subordinate employees. Crossover is when the experience of one person influences the experience of others in the same social environment and there is a paired effect between individuals. This happens in specific relationships, such as at the workplace (superior/subordinate, colleague) or in a family (married couple).

There are both negative and positive examples of crossover. For instance, even though it is widely thought that employees want to finish work at a fixed time, if the superior is willing to put in overtime and work for a long time, it will be difficult for subordinates to return home at a fixed time after seeing their superior's dedication. Therefore, employees cannot enjoy their personal lives, and a state of WLC develops. This means that the behavior of the superior affects not only the work of the employees, but also aspects of their personal lives. In this way, the superior's behavior could also have been influential in the personal life of his or her employees, and be a source of stress for many individuals.

Westman and Etzion (1999) describe crossover as ping-pong dynamics, where the stress of an individual has an influence on a member of a social system, such as a family or workplace, that eventually comes back to the individual. This means that the stress of a subordinate caused by the stress of a superior returns to the superior due to a crossover from the subordinate, and can again become a source of stress for the superior. Therefore, by examining crossover with a focus on the two-party relationship between superiors and their subordinates, it may be possible to discover new determinants of motivation and job satisfaction that were not evident when merely using individuals as units of analysis. In addition, this would be new knowledge useful for furthering WLB in the workplace.

In an empirical study of the crossover effect, as a means of explaining a stress model for negative crossover (Westman and Etzion, 1999), a broaden-and-build theory (Carlson et al., 2011) corresponding to positive crossover was developed. The broaden-and-build theory, according to Fredrickson (2001), was proposed as a theory to explain the development of positive feelings. This means that positive emotions, such as satisfaction with WLB, adaptively expand the repertoire of thought, behavior, and human relations, and consequently, various resources (physical, intellectual,

psychological, and social) are acquired. When positive resources are molded, mental and physical health are improved and further positive feelings arise. In addition, through the expansion of a repertoire of the positive emotions and behaviors of individuals, others in the same system have benefitted. That is, in a close relationship between two parties, the positive emotions from one party's WLB satisfaction will propagate and become a positive emotion for the other party.

However, in the research on crossover up to date, many studies have verified the crossover of negative experiences, but the amount of research pertaining to positive experiences has been little. Although there are many existing studies that focus on the crossover between married couples, there are few studies examining the relationship between superiors and subordinates in the workplace. If the superior's level of WLB satisfaction is transferred to his or her subordinates, an improvement in the subordinates' WLB satisfaction, motivation, and productivity can be expected.

Concerning the mechanism of crossover effect in married couples and superiors and subordinates, different matters also require attention. The relationship of a married couple is parallel, but the relationship between a superior and subordinates is one of vertical dyad linkage (Dansereau, Graen and Haga, 1975). Additionally, it is thought that there is a variation in the strength of the relationship between managers and their employees. It is widely viewed that, as a result, the crossover effect will change based on the relationship between the superior and his or her subordinates. In this study, we focus on the differences between men and women in the relationship between managers and their employees. This means that if the superior is a man, there is a possibility that the degree of influence from the superior to male and female subordinates may differ. As a result, we must ask whether there is a difference in the crossover effect for men and women in the relationship between superiors and subordinates.

3. Analysis Framework & Hypotheses

In this study, a comparative analysis, by gender, of the crossover effects in the relationships between management and employees in SMEs was conducted. SMEs involve closer relationships between management and employees than large enterprises because of their smaller scale and fewer employees. In SMEs, it is easier for employees to observe the daily

behaviors of the management. Therefore, if the manager's WLB satisfaction level is high, the positive feelings of the manager should be transferred to the employees, and it is thought that this will have a positive influence on the work engagement and WLB satisfaction of employees. However, these effects probably differ between men and women.

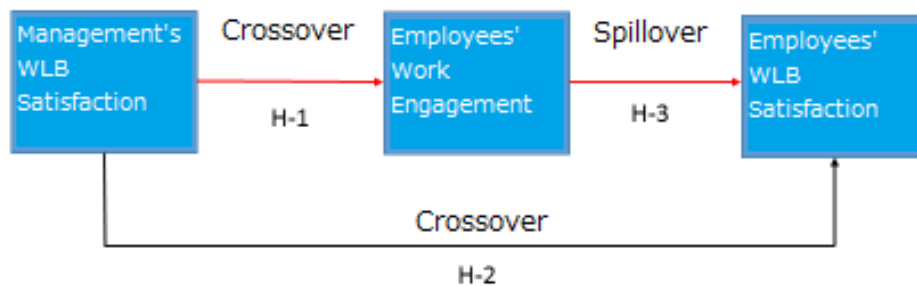
The basic hypothesis of this study is that the crossover effect from managerial WLB satisfaction to employees differs based on gender. In line with the analysis framework shown in Figure 1, the following three working hypotheses were established and verified by gender.

Hypothesis 1: Employee work engagement will increase as managerial WLB satisfaction increases (crossover effect)

Hypothesis 2: Employee WLB satisfaction will increase as managerial WLB satisfaction increases (crossover effect)

Hypothesis 3: Employee WLB satisfaction will increase as employee work engagement increases (spillover effect)

**Figure 1: Analysis Framework
(Gender Comparison)**



3. Methods

Data

The data used in this survey was obtained from the *Survey on the Advancement of Women and Young People in Small and Medium-Sized Enterprises* conducted jointly by the Osaka Labor Association and Kobe University in October of 2015. The authors participated in the project as members. In the survey, a questionnaire survey was conducted, targeting 1) companies (managers) and 2) junior employees working for those companies.

For distribution, a questionnaire was mailed to business owners with a questionnaire for employees also enclosed. Management or the headquarters' personnel department was asked to distribute the questionnaires to employees, which were then collected and sent back to the office. Additionally, a survey for management only was conducted for SMEs in the Kinki area, which is outside the Osaka prefecture. The employee survey was conducted at the business divisions, manufacturing departments, and other similar sections of the companies; and employees under the age of 39 (male and female) belonging to the companies' core departments were asked to respond. As a result, the departments and jobs of the respondents differed from company to company.

The subjects of the survey included 500 small SMEs within Osaka prefecture, and additionally, 50 companies in each of the six prefectures in the Kinki area, totaling an added 300 companies. The collection rate was 18.2% in Osaka prefecture and 19.6% for companies outside Osaka. In the analysis of the study, the matched data of the management and employees of enterprises in Osaka prefecture contained 79 male and 11 female managers (90 people); hence, around 90% were male. The employees that were full-time and under 39 years old included 641 men and 413 women (1,054 people).

Variables

Both management and employees were asked to rate five statements about WLB satisfaction level: 1) I am satisfied with my work-life balance, 2) I am able to spend time on both my work and personal life, 3) I am able to be ambitious as regards both my work and personal life, 4) I am able to fulfill my role in both my work and personal life well, and 5) I am satisfied with

both my work and personal life. Responses were made using the five-point Likert scale, and a score was determined by averaging the responses to the five questions (management- $\alpha = .902$, employee- $\alpha = .909$).

Schaufeli et al. (2002) defined work engagement as follows. Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.

In this study, for the question items, a shortened version (9 items) of the Utrecht Work Engagement Scale (UWES) explored in Schaufeli, Bakker, and Salanova (2006) was used. Work engagement uses a measure of vigor, dedication, and absorption. Vigor is a measure showing motivation for work, dedication is a measure showing pride and attachment to work, and absorption is a measure showing a focus on work. Question items for vigor were three items including and similar to "At my work, I feel bursting with energy" ($\alpha=.856$). Dedication included three items like "My job inspires me" ($\alpha=.871$). Absorption included three items including and similar to "I feel happy when I am working intensely" ($\alpha=.773$). All items were answered using the five-point Likert scale, and then averaged. In addition, analysis separated samples by gender and compared the features of both. Full-time employee (log), capital (log), dummy by industry, dummy by occupation, age, and having children were set as control variables.

4. Results

As shown in Tables 1 and 2, the management's WLB satisfaction level had a positive influence on the vigor of work engagement for both men and women. In other words, there was a crossover effect in the workplace between management and employees, and there was no difference related to the gender of the employees. Regarding dedication, no significant relationship based on gender was discovered, and regarding absorption, there was a significant relationship at a 10% level for men only. Therefore, Hypothesis 1 was partially supported.

Table 1 (H1) Crossover effect from Management's WLB satisfaction to Employee's Work Engagement (Male)

independent variables	dependent variables Vigor β	Dedication β	Absorption β
Full-time employee(log)	-0.019	-0.04	-0.07
Capital(log)	-0.046	0.031	0.068
Industry dummy_Manufacturing	-0.017	-0.112	-0.082
Industry dummy_Wholesale & Retail	0.041	-0.055	-0.022
Industry dummy_IT	0.013	0.021	0.067
Industry dummy_Medical & Welfare	0.078	0.043	0.063
Industry dummy_Finance, Insurance & Real Estate	0.093 †	0.072	0.106
Industry dummy_Service	0.107 †	0.059	0.035
Occupation dummy_Clerical	-0.063	-0.053	-0.022
Occupation dummy_Planning	-0.12 *	-0.078	-0.086 †
Occupation dummy_Technical	0.015	0.104	0.058
Occupation dummy_Sales	0.079	0.107	0.081
Occupation dummy_Production Skilled	-0.106	-0.069	-0.04
Occupation dummy_Service Skilled	-0.035	0.032	0.005
Age	0.037	0.009	0.047
Having children dummy	-0.068	-0.087	-0.031
Management's WLB satisfaction	0.132 **	0.167	0.085 †
adj. R2	0.071	0.082	0.048
F value	3.331 ***	3.72 ***	2.55 **

Results are standardizational coefficient β *** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .1$

Table 2 (H1) Crossover effect from Management's WLB satisfaction to Employee's Work Engagement (Female)

independent variables	dependent variables Vigor β	Dedication β	Absorption β
Full-time employee(log)	-0.006	-0.039	0.046
Capital(log)	-0.101	-0.06	-0.068
Industry dummy_Manufacturing	0.042	0.053	0.001
Industry dummy_Wholesale & Retail	0.119	0.154	0.144
Industry dummy_IT	-0.019	0.005	-0.105
Industry dummy_Medical & Welfare	0.1	0.187 †	0.019
Industry dummy_Finance, Insurance & Real Estate	0.07	0.049	0.05
Industry dummy_Service	0.2 †	0.188	0.158
Occupation dummy_Clerical	0.096	0.068	-0.021
Occupation dummy_Planning	0.025	0.031	0.056
Occupation dummy_Technical	0.097	0.104	0.113
Occupation dummy_Sales	0.125	0.125	0.075
Occupation dummy_Production Skilled	0.065	0.092	0.026
Occupation dummy_Service Skilled	0.126	0.066	0.09
Age	0.128 †	0.131 †	0.132 †
Having children dummy	-0.178 *	-0.101	-0.177 *
Management's WLB satisfaction	0.213 **	0.143 †	0.088
adj. R2	0.054	0.024	0.039
F value	1.869 *	1.37	1.609 †

Results are standardizational coefficient β *** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .1$

The impact of a manager's WLB satisfaction on the WLB satisfaction of employees is shown in Table 3, where men can be seen to have a positive relationship at the 1% level, but no such relationship was seen in women. Therefore, Hypothesis 2 was supported for men but dismissed for women.

Table3 (H2) Crossover effect from Management's WLB satisfaction to Employee's WLB satisfaction

	Male	Female
dependent variables	WLB satisfaction	
independent variables	β	β
Full-time employee(log)	0.108 *	-0.023
Capital(log)	-0.946	0.118
Industry dummy_Manufacturing	-0.042	0.126
Industry dummy_Wholesale & Retail	0.045	-0.024
Industry dummy_IT	0.018	-0.011
Industry dummy_Medical & Welfare	0.039	0.12
Industry dummy_Finance, Insurance & Real Estate	0.05	0.01
Industry dummy_Service	0.146 *	-0.019
Occupation dummy_Clerical	-0.096	0.155
Occupation dummy_Planning	-0.088 †	0.124 †
Occupation dummy_Technical	-0.027	0.064
Occupation dummy_Sales	-0.067	-0.087
Occupation dummy_Production Skilled	-0.024	-0.014
Occupation dummy_Service Skilled	-0.015	0.062
Age	-0.077	-0.031
Having children dummy	-0.078	-0.036
Management's WLB satisfaction	0.165 **	0.085
adj. R2	0.023	0.014
F value	1.708 *	1.217

Results are standardizational coefficient β *** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .1$

As Table 4 shows, as work engagement (vigor) increases for both men and women, WLB satisfaction increases. There is a spillover effect from work into personal life regardless of gender. Therefore, hypothesis 3 was supported for both men and women.

Table 4 (H3) Spillover effect from Employee's Work Engagement to Employee's WLB satisfaction

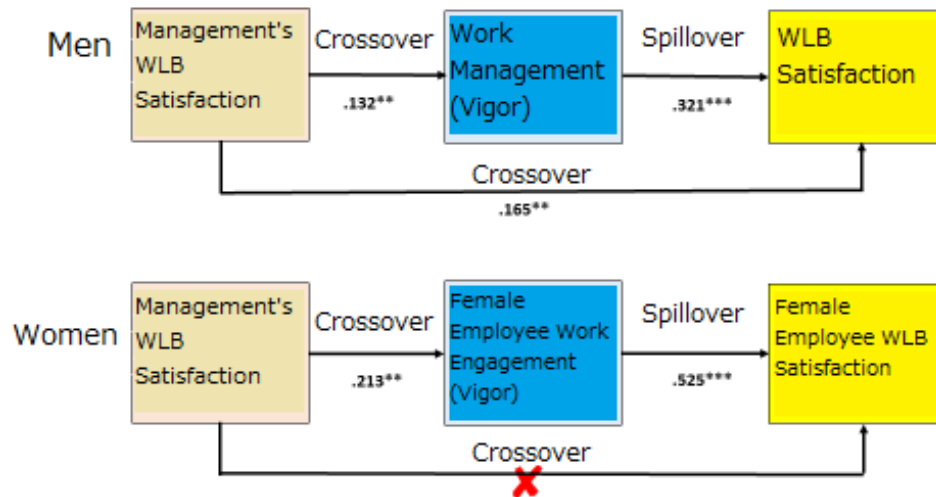
	Male	Female
dependent variables	WLB satisfaction	
independent variables	β	β
Full-time employee(log)	0.114 *	-0.013
Capital(log)	-0.027	-0.068
Industry dummy_Manufacturing	0.05	0.082
Industry dummy_Wholesale & Retail	0.003	-0.084
Industry dummy_IT	0.035	-0.007
Industry dummy_Medical & Welfare	-0.081	0.066
Industry dummy_Finance, Insurance & Real Estate	0.023	-0.024
Industry dummy_Service	0.112 *	-0.123
Occupation dummy_Clerical	-0.075	0.105
Occupation dummy_Planning	-0.049	0.116 †
Occupation dummy_Technical	-0.032	0.032
Occupation dummy_Sales	-0.092	-0.139 †
Occupation dummy_Production Skilled	0.011	-0.04
Occupation dummy_Service Skilled	-0.005	-0.003
Age	-0.088 †	-0.089
Having children dummy	0.056	-0.055
Management's WLB satisfaction	0.123 **	-0.039
Employee's Work Engagement(Vigor)	0.321 ***	0.525 ***
adj. R2	0.117	0.266
F value	4.785 ***	6.13 ***

Results are standardizational coefficient β *** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .1$

5. Discussion

Management's WLB satisfaction level influences the work engagement (vigor) of both men and women. In other words, there is a crossover effect between management and employees in the workplace for both men and women. However, the influence of the managers' WLB satisfaction on that of employees' while observed in male subordinates is not observed in female subordinates. The results are summarized in Figure 2.

Figure 2: Results Summary



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The managers sampled in this study were overwhelmingly dominated by men at 90%. For female employees, it is likely difficult for male managers (apart from the workplace) to become WLB role models for their personal lives. In addition, the stereotypes and paternalism that male management has towards female subordinates are also possible causes of the suppression of the crossover effect on women.

Although crossover is described as a spread of well-being among close individuals (Bakker, et al., 2011), compared to marital relationships, the relationships between management and employees cannot all be said to be close relationships. That is, given that the crossover effect relies on the closeness of the relationship between individuals, there is a possibility that the relationships between male managers and female subordinates are quantitatively different from those with male subordinates, thereby affecting the results.

In a vertical dyad linkage model, the differences in role expectation and quality of role freedom between superiors and subordinates are thought to define the attitudes and actions of subordinates. In particular, management may establish high-quality relationships of trust and care with favored employees (for example, men). However, less favored employees (for example, women) may have simple relationships that do not extend beyond

the workplace. Male management, in order to propagate positive feelings, needs to have high expectations for the roles of female subordinates, and increase the degree of freedom of roles based on trust. Further, in order to be a good role model for female employees as well as male employees, it is important that management also practice WLB.

The following four points are the limits to this study. 1) Analysis was done using cross-section data. 2) Despite having hierarchical data, the data was analyzed without regard to hierarchy due to the issue of sample size. 3) Female managers were also included in the data but analysis was only done regarding how male management relates to subordinates. 4) The qualitative aspect of the vertical exchange relationship between superiors and subordinates was not captured.

References

- Bakker, A. B., Shimazu, A., Demerouti, E., Shimada, K., & Kawakami, N. (2011) "Crossover of work engagement among Japanese couples: Perspective taking by both partners," *Journal of Occupational Health Psychology*, 16(1): 112-125.
- Carlson, D. S., Ferguson, M., Kacmar, K. M., Grzywacz, J. G., & Whitten, D. (2011) "Pay it forward: The positive crossover effects of supervisor work—family enrichment," *Journal of Management*, 37(3): 770-789.
- Dansereau, F., Graen, G., & Haga, W.J. (1975) "A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process," *Organizational Behavior and Human Performance*, 13(1): 46-78.
- Fredrickson, B. L. (2001) "The role of positive emotion in positive psychology: the broaden-and-build theory of positive emotion," *American Psychologist*, 56(3): 218-226.
- Greenhaus, J.H., & Nicholas J. B. (1985) "Sources of Conflict between Work and Family Roles," *Academy of Management Review*, 10(1):76-88.
- Greenhaus, J. H., & Powell, G. N. (2006) "When work and family are allies: A theory of work-family enrichment," *Academy of Management Review*, 31(1): 72-92.

- Kishino, S. (2016) “Wa-ku raifu fashirite-shon no kurosu oba-kouka ni kansuru kenkyuu.” [A research about crossover effect of work-life facilitation.] *Japan Society of Human Resource Management 44th National Convention Reports*, 147-154.
- Osaka Labor Association & Kobe University Hirano Labo. (2016) *Chuushokigyou ni okeru Josei to Wakamono no Katsuyaku Suishin ni kakawaru Chousa Houkokusho* [A report of the investigation about women’s and youth success promotion in small and medium enterprises.] Osaka Labor Association.
- Poelmans, S., Stepanova, O., & Masuda, A. (2008) Spillover between personal and professional life: Definitions, antecedents, consequences, and strategies. In Korabik, K., Lero D.S., & Whitehead, D. (eds.), *Handbook of Work-Family Integration: Research, Theory, and Best Practices*, 57-73. San Diego, CA: Academic Press.
- Schaufeli, W.B., Salanova, M., González-Romá, V., & Bakker, A.B. (2002), “The measurement of engagement and burnout: A two sample confirmatory factor analytic approach,” *Journal of Happiness Studies*, 3: 71-92.
- Schaufeli, W.B., Bakker, A.B., & Salanova, M. (2006) “The measurement of work engagement with a short questionnaire: A cross-national study,” *Educational and Psychological Measurement*, 66(4): 701-716.
- Westman, M., & Etzion, D. (1999) “The crossover of strain from school principals to teachers and vice versa,” *Journal of Occupational Health Psychology*, 4(3): 269-278.

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