

The Effect of Public Officers' Work-Life Balance on Job Satisfaction Differences between Men and Women*

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Abstract: We performed an empirical analysis based on data from a questionnaire survey that Korean government officers participated in about the effects of work-life balance (WLB) on job satisfaction in order to whether unpaid labor such as housework had a moderating effect on job satisfaction. The subjective balance of an individual's time input in work and life was used to measure WLB. We find that WLB has a positive and significant effect on job satisfaction and that there is no statistically significant gender difference. However, the WLB effect on married female officers is smaller than that on single female officers, while it is not significant for male public officers. Child-rearing has a negative moderating effect on women's job satisfaction, although this was not statistically significant. This result suggests that the effect of the household work burden that marriage as well as child care brings is a variable that policy makers should be keep in mind in developing WLB policies.

Keywords: work-life balance, job satisfaction, gender division of labor, public officers, marital status, child-rearing

INTRODUCTION

This study analyzes the effect of work-life balance (WLB) on the job satisfaction of public officers in Korean central government departments. Specifically, we examine whether WLB has a significant and positive effect on job satisfaction and

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the effect of both rearing children or not and carrying out household work (unpaid labor) or not on this relationship. The purpose of this study is to test effect of WLB on the job satisfaction and to make a recommendation that taking the gender division of labor into account will enable policy makers to establish WLB policies that will improve the job satisfaction of public officers.

As in other OECD countries, WLB has become a familiar term in Korea (Park & Sohn, 2014). However, this familiarity does not seem to stem from the impact of the WLB policies but from the social trends or issues that reflect public interest and demand. Although the WLB policy has been implemented, there has not been enough change in reality to be felt. We began this study by questioning whether recent WLB policies were designed in a way to produce the sort of effects we think are needed.

We raised this question in light of three characteristics of the latest WLB policies. First, the latest policies do not address differences between men and women, despite the fact that the demand for WLB in today's society has increased in accordance with the expansion of the participation of women in paid economic labor. Second, the policy tools pertain mostly about work, even though WLB is about the balance between work and personal life. It is doubtful that seeking changes only in work using policy instruments is a suitable way to strike a balance with life. Third, the latest policies do not address cultural elements including underlying stereotypes in Korea about gender roles in the family that must be taken into account to achieve WLB. The number of studies on WLB in private sector organizations has been growing, but few focus on public officer groups. With a growing number of WLB policies in the government sector as well as a growing number of female public officers, a WLB study on public officers that considers gender differences is needed.

Our study is structured as follows. The second section introduces the concept of WLB and provides a theoretical discussion of its logic. We also outline the key issues and hypotheses of the study, based on a literature review. In the third section, we describe our data collection methods and the key variables of the study, and we discuss the outcomes of the descriptive analysis we provide. In the fourth section, we present the results of the empirical analysis of the data we collected through a questionnaire survey. And in the last section, we summarize and interpret the results of the analysis and draw several conclusions.

THEORETICAL DISCUSSION AND LITERATURE REVIEW

Concept of Work-Life Balance

WLB refers to the appropriate allocation of physical and psychological energy to work and nonwork activities such as leisure, family, or personal development and growth (Madsen, 2003; Tausig & Fenwick, 2001).¹ The meaning of balance must be clarified to clearly understand the notion of WLB. Balance is as a state where attention, interest, and time are assigned between work and life depending on the importance a person assigns to each (Tausig & Fenwick, 2001). Personal importance and appropriate allocation are subjective. Balance is the degree of match between reality and an individual's expectations for time allocation. According to role conflict theory, a mismatch between reality and expectations as to the amount of time one will spend on performing various roles at the same time results in a conflict (Greenhaus & Beutell, 1985).

Since the 1970s, WLB has been treated as a component of the quality of work life (da Silva Timossi, Pedroso, de Francisco, & Pilatti, 2008). Working conditions that increase a worker's personal life satisfaction are an incentive that can attract competent workers (S. Kim, 2000). In a situation where the decreasing birth rate has decreased the size of the talent pool, hiring competent female workers has become critical. Accordingly, it has become important for organizations to ensure the compatibility of work and life. Furthermore, younger people have different priorities from older generations; they are less focused on work and put more value on self-actualization and personal happiness (Cho & Faerman, 2008).

WLB policies are viewed as improving time input in life by making it possible to control time input at work. These policies are based on the premise that work and life are connected. According to spillover theory, behaviors and emotions in one realm affect those in another (Crouter, 1984), and positive emotions at work (or at home) spill over to family (or work). Therefore, the purpose of WLB policies can be understood as encouraging positive emotions by making it possible to control time at work and to input a proper amount of time in life, which in turn results in spillover of these positive emotions back into work. In this scenario, what is important is not just controlling time at work but also making it possible for an individual to use the extra time gained from not working in his or her personal life.

1. Another view is that WLB is not constructed based on the two axes of work and life but on the three axes of paid labor, unpaid labor, and personal leisure (for example, the virtuous triangle model of Jonathan Gershuny [2000]).

Recent WLB studies in organizational psychology and human resources management have confirmed the positive effect of WLB (Benito-Osorio, Muñoz-Aguado, & Villar, 2015; Hossain & Rokis 2014; Bloom, Kretschmer, & Van Reenen, 2011; Chou & Cheung, 2013; Sprung, Toumbeva, & Matthews, 2015, Ng & Ng, 2007). In Korea, several studies have demonstrated the importance of WLB and WLB policies (Lee & Cheon, 2009; C.-W. Kim & Park, 2008; Lee, 2004).

The Effect of WLB: Job Satisfaction

Job satisfaction is defined as a set attitudes including emotional attachment to one's job, a sense of belonging (Meyer & Allen, 1984), and positive emotions and psychological states resulting from one's job or performance (Spencer & Steers, 1981). Job satisfaction significantly contributes to the level of an organization's performance or goal accomplishment (Pick & Teo, 2017; Cantarelli, Belardinelli, & Belle, 2016; Andersen & Kjeldsen, 2013; Jung, Moon, & Hahm, 2007). According to affective events theory, individuals have an affective reaction based on their experiences in the work environment that leads to job satisfaction or dissatisfaction (Weiss & Cropanzano, 1996). Furthermore, social exchange theory stresses that one of an individual's responses to the benefits or considerations provided by an organization is job satisfaction (Noblet & Rodwell, 2008). One such benefit of WLB policies is leeway or flexibility in working hours. Studies on various occupations have already found a positive relation between WLB and job satisfaction (Haar, Russo, & Ollier-Malaterre, 2014; Noor, 2011; Morganson, Major, & Obron et al., 2010)

The public sector in Korea has put WLB policies such as the flex-time work system and the alternative work schedule into effect, but there are not many studies yet documenting their results. Overall, previous studies demonstrated that improvements in WLB had a positive effect on job performance, innovation, and turnover intention (H.-Y. Kim & Park, 2017; H. Y. Kim, Oh, & Park, 2015; Oh & Park, 2014; Cho, Lim, & Lee 2010). The same positive effect of WLB on job performance has been observed both in public and private sector organizations but this does not tell us how WLB policies affect an individual's personal life. H.-G. Oh and S.-M. Park (2014), for example, demonstrate that WLB policies have a positive effect on public officers' job satisfaction but that such policies did not necessarily lead to satisfaction with both work and life. Even if flexibility in work schedule increases the time that one has to devote to one's personal life does not guarantee

that one will spend the time as intended.²

The point of WLB policies in Korea is to expand or encourage flexible time input in life by allowing individuals to flexibly control their working hours on their own. The implementation of such policies in the public sector where work schedules have typically been rigidly set would make it easier for public servants to devote more time to their personal life. However, to ensure that such policies lead to a positive result such as improved job satisfaction, individuals must be able to spend the extra time on nonwork activities. If instead they use the extra time to do household work or unpaid labor, the increase in free time to devote to leisure or relaxation would be small.

WLB policies provide an opportunity to control and utilize time in work and life, but whether or how this opportunity is used as intended is another problem. This study reckons that being a male or female makes a significant difference in how the extra time gained from flexible work hours is used in life. In particular, in countries like Korea, where the level of gender equality is lower compared to that of other countries and traditional gender role stereotypes maintain a strong grip on society, women are disproportionately burdened with unpaid labor such as child-rearing and household work. Working middle-aged women who undertake traditionally female-gendered tasks have a relatively higher level of WLB conflict. Therefore, it is hypothesized that gender differences related to unpaid labor have an important moderating effect on the effectiveness of WLB policies.

Unpaid Working Hours by Gender

As the economic participation of women drastically increased in the 20th century, interest in gender differences with respect to unpaid labor increased as well. Researchers supposed that the gender gap in unpaid labor would decrease when the

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2. WLB is a concept of how time and energy is well allocated not just with respect to work area but also with respect to personal life. Regarding job satisfaction, employees are typically assigned specific jobs within an organization rather than being able to choose what they want to do. And the working conditions, such as working hours and environment, are still difficult for an individual to freely select or adjust. It seems to be very rare for employees to devote more energy and time to their job just because they have a high job satisfaction level as well as for them to adjust the amount of time and energy that they put into their personal life based on the level of job satisfaction. So because the job satisfaction of employees is their subjective perceptions of a given job, whether they are able to spend their time and expend their energy in a way that lines up with what they think is important, is an important component of WLB.

gender gap in paid labor decreased and the number of dual-income families increased, but in 2014, the number of household work minutes per day for men in Korea was 45, while that for women was 227 (see www.oecd.org/els/family/database.htm). According to data from Statistics Korea for 2016, 79% of respondents reported that women mostly did household work, 18% said men and women split it fairly, and 3% said that men mostly did household work (see www.oecd.org/els/family/database.htm).

According to the gender division of labor, which among other theories explains the gender gap in unpaid labor, women disproportionately bear the burden of unpaid labor because of gender role expectations and norms (Greenstein, 2000; Brines, 1994). This suggests that even though the number of hours women spend engaging in paid labor has increased, unpaid labor remains the job of women, men playing a peripheral and residual role in unpaid household work. The influence and mandate of gender role norms is such that a gender gap persists in the number of unpaid labor hours men and women work, despite changes in the paid labor market. A study based on interviews with 50-72-year-olds in upstate New York during the last decade of the twentieth century also demonstrated that married women considered family their primary responsibility and participated in simple leisure activities that only took a short amount of time; they saw their job as responding to their family's needs and not attending to their own (Han & Moen, 1999).

RESEARCH DESIGN

Hypotheses

To examine the moderating effects of WLB, this study employs gender, marriage, and children as variables. The study intends to examine whether a gender gap in unpaid labor hours is likely to reduce the effect of WLB. Household work and child-rearing were defined as two important unpaid labor activities, and a variable for each of these activities was included in an analysis model to determine whether it has a moderating effect on WLB.

Our first hypothesis is that the level of WLB has a statistically significant and positive effect on job satisfaction. The second is that there are significant gender differences in the effect of the level of WLB on job satisfaction. The third is that the level of WLB has a greater effect on job satisfaction for men than women (the regression coefficient will be greater). The fourth is that for men, marriage has a statistically significant moderating effect on the effect of the level of WLB on job

satisfaction (the coefficient for men will be larger than that for women). And the fifth is that for men, having a child has a statistically significant moderating effect on the effect of the level of WLB on job satisfaction (the coefficient for men will be larger than that for women).

We tested the third and fourth hypotheses to determine if the effect of WLB is consistently greater for men. Our assumption was that if women disproportionately engage in unpaid labor, a part or whole of increased time spent on their personal life would be spent doing unpaid labor, despite the fact that increased WLB increases the time allotted for personal life. Since men perform relatively less unpaid labor and can devote more of the additional hours they receive from WLB to their lives than women, the effect of WLB on men is expected to be greater. In terms of variables related to child-rearing, we simply measured whether they had children and whether they had preschoolers. The burden on women with respect to household chores will be greatly reduced if their children attend school.

Data Collection

In this study, we used a questionnaire survey and conducted in-depth interviews. First, after we had collected WLB policy information from the central government, we carried out interviews with public officers in central government departments. Next, based on interview results, we formulated questions for a survey. 200 respondents from 10 relocated ministries (20 members in each department) and 200 from 5 ministries that were not relocated (40 members in each department) were allocated and extracted in light of their position and gender.³ The survey was conducted from September 1 to September 16, 2014, and while the basic method was a door-to-door visit, e-mail and fax were also used. The accompanying cover letter outlined the study objectives, requested participation, and guaranteed anonymity. After this screening, we finally analyzed a sample of 398 public officers. Eventually, we used 380 responses in our analysis (we excluded 18 cases in which the respondent

3. The 10 relocated ministries were the Ministry of Education, the Ministry of Culture, Sports, and Tourism, the Ministry of Agriculture, Food, and Rural Affairs, the Ministry of Trade, Industry, and Energy, the Ministry of Health and Welfare, the Ministry of the Environment, the Ministry of Employment and Labor, the Ministry of Land, Infrastructure, and Transportation, the Ministry of Maritime Affairs and Fisheries, and the National Ministry of Veterans Affairs. The 5 ministries that were not relocated were the Ministry of Safety and the Interior, the Ministry of Gender Equality and Family, the Ministry of Government Legislation, the Ministry of Science, ICT, and Future Planning, and the National Emergency Management Agency.

either gave the same answer to every question or gave unrealistic answers). The survey respondents were randomly selected, but we did not allocate the number of respondents to match the actual staffing of government departments.

Table 1. Survey Sample Specification

Category		Sample	Rate (%)
Gender	male	265	69.74
	female	115	30.26
Marital Status	unmarried	82	21.58
	married	298	78.42
Number of Children	none	105	27.63
	yes	275	72.37
	0	23	6.05
	1	87	22.89
	2	160	42.11
	more than 3 presence of a preschooler	28 124	7.37 45.1
Position	fifth-class or higher-level	55	14.47
	sixth-class or lower-level	325	85.53
Years of Service	less than 5 years	7	20.26
	5-10 years	100	26.32
	10-15 years	84	22.11
	15-20 years	46	12.11
	more than 20 years	73	19.21
Age	20s	29	7.63
	30s	177	46.58
	40s	157	41.32
	50s plus	17	4.47

Table 2. Specifications of Survey Respondents According to Gender

Category	Marriage and Parenting			Department Relocation	
	married / children	married / no children	unmarried	relocated	did not relocate
Male (265)	202	14	49	122	143
Female (115)	73	9	33	64	51

Key Variables

Job satisfaction is the dependent variable in our study. Job satisfaction refers to individuals' attitudes toward their jobs. Positive job satisfaction increases productivity and decreases turnover. This variable is thus regarded as an important indicator of an organization's effectiveness. Using a method proposed by Marilyn Davidson and Cary Cooper (1983), we measured perceptions regarding job satisfaction via a survey that presented the following statements: "My ability is recognized in the workplace," "I am treated as I deserve to be," "I am satisfied with the job I am performing," and "Being a public officer helps develop my ability." The results were grouped into one variable after we performed a factor analysis (factor loading > 0.6).

To measure WLB, we focused on the respondents' subjective recognition of time allocation in both work and life. According to Jeffrey Greenhaus and colleagues (2003), WLB is a state of affairs in which time devoted to and immersion in work and life are balanced. This balance does not refer to devoting the same amount of time to work and life but to a subjective perception that is grounded in the value an individual assigns to each part of their life. Since WLB is an abstract concept, it is difficult to measure it with a single question. Hence, we created detailed questions using a method used to measure WLB in a study by C.-W. Kim and J.-Y. Park (2008), calculated the average, and used it as a variable. The scale developed by Kim and Park includes four factors: life and family balance, work and leisure balance, work and growth balance, and overall evaluation of work and life. We measure the overall level of WLB using questions on three of these four factors: balance between work and family life, balance between work, culture, and leisure life, and balance between work and personal development.⁴ We formulated two questions for each factor, which we measured using a five-point Likert scale (table 3). We performed a factor analysis on the six questions, which indicated that all factor loadings were higher than 0.70. Therefore, we used the average to indicate the level of WLB.

4. We determined that the overall evaluation of work and life overlaps with the other three factors.

Table 3. Questions Used to Measure WLB, Job Satisfaction, and Public Service Motivation

Variable	Questions (1 = Strongly Disagree-5 = Strongly Disagree)	Factor Loading	Eigen Value
WLB	I experience harmony between my workplace work and housework.	0.887	0.213
	I find my concentration is inhibited in the workplace due to problems in private life (inverse coding)	0.710	0.485
	I am able to maintain my physical and mental health while playing dual roles.	0.849	0.279
	I am able to harmonize work and self-development.	0.878	0.230
	I am able to harmonize work and leisure activities.	0.902	0.186
	I get personal time after business hours.	0.753	0.432
Job Satisfaction	I am recognized at work.	0.633	0.289
	I am being treated in a way that I think is fair.	0.609	0.295
	I am satisfied with what I am doing in the workplace.	0.797	0.326
	My current job as a public officer helps me develop my ability.	0.641	0.278
Public Service Motivation	I am very interested in establishing a public program (policy) for the benefit of the society to which I belong.	0.725	0.474
	It is more important to me to do something worthwhile than to pursue economic rewards.	0.761	0.421
	I think public service is my duty as a citizen.	0.849	0.278
	I am ready to sacrifice myself for the good of society.	0.758	0.426
	It hurts to see the plight of the underprivileged.	0.723	0.322
	Patriotism for me involves the promotion of other people's welfare.	0.819	0.328

Table 3. Questions Used to Measure WLB, Job Satisfaction, and Public Service Motivation

The relocation in 2014 of 36 central government agencies and 16 national research institutes originally located in Seoul to Sejong City, established in 2005 to ensure the balanced development of Korea and redistricted and designated as a special self-governing city in 2012, has drastically changed the work environment of public servants, even though they still perform the same job, because all facilities have been newly built. We thus used relocation as a control variable. At least one study has found that a department's relocation to Sejong City affected the turnover of public officers (Hur & Lee, 2015). In this study, a t-test demonstrated differences in job satisfaction depending on the department's relocation to Sejong City (relocation = 3.143 and nonrelocation = 3.101), although this was not statistically significant.

Another control variable in this study was public service motivation, which

refers to an individual's altruism or public morality (Bright, 2007). Public service motivation has been used in many studies, and thus there are many indicators that have been proposed for it (Christensen, Paarlberg, & Perry, 2017; Campbell & Im, 2016; Cantarelli, Belardinelli, & Belle, 2016; Andersen & Kjeldsen, 2013). However, the number of questions would have been too high if we had used all of these indicators, so instead we included only six questions from previous studies in our questionnaire. In addition, we measured the number of overtime working hours and hours spent on cultural and leisure activities and personal development (personal leisure hours) in a month via a questionnaire to estimate the amount of time an individual devoted to work and life. We analyzed the results to determine whether gender affected the correlation with WLB. Tables 4 and 5 provide the descriptive statistics and correlations between the continuous variables. Except for years of service, the variables were measured on a five-point scale.

Table 4. Descriptive Statistics for Variables

Variable	Sample	Mean	Standard Deviation	Minimum	Maximum
Job Satisfaction	380	2.596	0.743	1	4.8
WLB	380	2.699	0.642	1	4.333
Years of Service	380	11.45	7.350	0.5	33
Public Service Motivation	380	3.387	0.615	2	5
Satisfaction with Vacation and Leave Time	380	3.033	0.736	1	5
Monthly Hours Devoted to cultural, leisure, and Self-Development Activities	380	17.167	19.999	0	104
Monthly Overtime Working Hours	380	21.228	18.144	0	90

Table 5. Results of Correlation Analysis

	Job Satisfaction	WLB	Years of Service	Public Service Motivation
Job Satisfaction	1.000			
WLB	0.618***	1.000		
Years of Service	0.125	-0.007	1.000	
Public Service Motivation	0.229***	0.222***	0.076	1.000

Note: * p<0.1, ** p<0.05, *** p<0.01.

We performed the analysis for this study in three steps. First, we conducted a correlation analysis between an individual's level of WLB and the number of overtime hours he or she worked, the number of hours he or she devoted to leisure, and his or her willingness to take annual leave. We took this approach because WLB is not simply about the number of hours an individual has for personal leisure activities but about he or she using them for those activities. In Korea where life is heavily centered on work, a better WLB would result in fewer hours spent working and more hours devoted to personal leisure. We divided and examined the correlations according to gender and performed a correlation analysis on the married group and those with child-rearing responsibility. We analyzed the cases of those who were burdened with household work burden and those with children to determine if gender influenced the correlations.

In the second step, we tested our first hypothesis—that the level of WLB has a statistically significant and positive effect on job satisfaction—and our second hypothesis—that there are significant gender differences in the effect of the level of WLB on job satisfaction. In addition, we analyzed the moderating effects of the marriage and child-rearing variables. The questionnaires of all respondents were included. Furthermore, we included all gender, marriage, and child-rearing variables as moderating variables in the analysis model, and we examined the results.

In the third step, we analyzed each gender. However, instead of creating interaction terms between gender and marriage as well as between gender and child-rearing and analyzing the moderating effects, which creates multicollinearity issues that make it more difficult to interpret the results, we separated respondents by gender and then examined the moderating effects using the marriage and child-rearing variables. We wanted to identify whether gender differences in the effect of WLB pertained specifically to household work or child-rearing and education because this makes a difference to the improvements we would recommend for policies related to WLB.

RESULTS

WLB and personal leisure hours had a positive correlation, with a coefficient of 0.113, and the level of significance was 0.027, a statistically significant result, and the correlation between WLB and overtime working hours was -0.088, with a level of significance of 0.084, which suggests that a higher level of WLB is inversely proportional to overtime working hours. These correlations do not take gender into account.

Table 6 provides the results for the gender, marriage, and child-rearing variables. For women, we found no significant correlation between WLB and overtime working hours and between WLB and personal leisure hours when they were married or raised children. In contrast, for men, we did find a positive correlation between WLB and personal leisure hours and a negative correlation between WLB and overtime working hours: there is a significant inversely proportional relationship between the level of WLB and the amount of time spent working and a significant proportional relationship between the level of WLB and personal leisure hours. For women, it is difficult to confirm significant correlations between changes in the level of WLB and working hours and between changes in the level of WLB and personal leisure hours: a better WLB did not seem to decrease the amount of time spent work and an increase the number of hours devoted to personal leisure. This result might be explained by the effect of gender differences on unpaid labor hours.

Table 6. Correlation Analysis Results for Gender, Marital Status, and Child-Rearing Variables

Group		Female			Male		
		WLB	Personal Leisure Hours	Overtime Working Hours	WLB	Personal Leisure Hours	Overtime Working Hours
All	WLB	1.000			1.000		
	personal leisure hours	0.104 (0.268)	1.000		0.117* (0.055)	1.000	
	overtime working hours	0.131 (0.272)	0.019 (0.834)	1.000	-0.149** (0.014)	-0.027 (0.657)	1.000
Married	WLB	1.000			1.000		
	personal leisure hours	0.123 (0.270)	1.000		0.112* (0.099)	1.000	
	overtime working hours	0.089 (0.426)	-0.096 (0.389)	1.000	-0.171** 0.011	-0.014 (0.831)	1.000
Presence of Child	WLB	1.000			1.000		
	personal leisure hours	0.174 (0.139)	1.000		0.137** (0.050)	1.000	
	overtime working hours	0.026 (0.826)	-0.065 (0.581)	1.000	-0.159** (0.023)	-0.018 (0.797)	1.000
Presence of a Preschool Child	WLB	1.000			1.000		
	personal leisure hours	-0.087 (0.659)	1.000		0.138** (0.174)	1.000	
	overtime working hours	0.159 (0.416)	-0.024 (0.910)	1.000	-0.269* (0.080)	0.086 (0.423)	1.000

Note: * p<0.1, ** p<0.05, *** p<0.01.

Related to the second step, the results of the analysis of the effect of WLB indicate that a higher level of WLB leads to higher job satisfaction. These results were statistically significant (table 7), thus proving our first hypothesis that the level of WLB has a statistically significant and positive effect on job satisfaction to be valid. Furthermore, the regression equation shows that the value greatly increased when the WLB variable was added; thus, WLB could be a useful variable in explaining job satisfaction (results 1-1 and 1-2 in table 7). These results suggest that if government WLB policies enabled public officers to appropriately allocate the time they devote to work and life, their job satisfaction would increase (their dissatisfaction would decrease). A moderating effect between WLB and the gender variable demonstrates that a higher level of WLB has a greater effect on job satisfaction for men than women, although these results were not statistically significant (see results 1-4 of table 7). Thus, it is difficult to confirm that this result alone can justify the hypothesis that the level of WLB has a greater effect on job satisfaction for men than women.

Table 7. Regression Analysis Results

Variables	Result 1-1 b/se	Result 1-2 b/se	Result 1-3 b/se	Result 1-4 b/se	Result 1-5 b/se	Result 1-6 b/se
Years of Service	-0.003 (0.004)	-0.003 (0.003)	-0.003 (0.003)	-0.005 (0.004)	-0.005 (0.004)	-0.004 (0.003)
Public Service Motivation	0.654*** (0.044)	0.582*** (0.041)	0.580*** (0.041)	0.577*** (0.041)	0.584*** (0.041)	0.559*** (0.041)
Position Dummy (Grade Higher than 5 = 1)	0.341*** (0.078)	0.317*** (0.071)	0.310*** (0.072)	0.320*** (0.071)	0.312*** (0.071)	0.359*** (0.072)
Department Relocation Dummy (Relocated = 1)	0.140** (0.055)	0.221*** (0.050)	0.226*** (0.051)	0.214*** (0.051)	0.213*** (0.051)	0.228 (0.050)
WLB		0.350*** (0.039)	0.284*** (0.085)	0.532*** (0.130)	0.295*** (0.108)	0.263 (0.050)
Gender Dummy (male = 1)			-0.166 (0.259)			
WLB*Gender			0.082 (0.095)			
Marital Status Dummy (married = 1)				0.601 (0.371)		

WLB*Marital Status						-0.199 (0.135)
Child Rearing Dummy (rearing = 1)						-0.101 (0.314)
WLB*Child Rearing						0.06 (0.114)
Presence of Preschool Child (yes = 1)						-0.540** (0.215)
WLB*Preschool Child						0.213*** (0.078)
Constant	0.822*** (0.156)	0.088 (0.164)	0.228 (0.265)	-0.416 (0.364)	0.21 (0.312)	0.386* (0.201)
R-Square	0.416	0.519	0.521	0.523	0.521	0.529

Note: * p<0.1, ** p<0.05, *** p<0.01.

WLB has a greater effect on married respondents (the regression coefficient sign for the moderating effect variable is positive). When the other conditions were equal, better WLB increased the job satisfaction of those married more than that of single individuals. In addition, a better WLB increased job satisfaction for participants with children than for those without. However, the results for the moderating effects of marriage and children were not statistically significant. But our analysis of preschoolers' presence showed more pronounced results. Job satisfaction was found to be lower when the respondent had a preschooler than when the respondent did not. In other words, job satisfaction was lower than in cases where there was a child-rearing burden. However, when we looked at the interaction between WLB and child-rearing, we found that the effect of WLB was not significant. In addition, the effect of job satisfaction on WLB was found to be greater than that of the other cases when the child care burden was greater. These results suggest it is necessary to look at them separately by gender.

Regarding the control variables, first higher public service motivation resulted in higher job satisfaction. The years of service variable, which was used as a proxy variable for age and is intended to capture to the level of adaptation to public service life, had a negative coefficient: longer years of service decreased job satisfaction, although this result was not statistically significant. In addition, an analysis that included a high position dummy variable (grade 5 or higher = 1) as a variable for the nature of the work the public offer did showed that public officers at grade 5 or higher had more job satisfaction than those at lower grades. The result was statistically significant. Second, the relocation of a given department to Sejong City

revealed that job satisfaction was higher when the department was relocated than when it was in Seoul. The improved work environment might have contributed to this result, as Sejong City has new buildings and facilities.

To demonstrate our fourth and fifth hypotheses—that for men, marriage has a statistically significant moderating effect on the effect of the level of WLB on job satisfaction and that for men, having a child has a statistically significant moderating effect on the effect of the level of WLB on job satisfaction, respectively—we divided the data according to gender and then used it to analyze the moderating effect of WLB, marriage, and child-rearing (table 8). The results of the analysis indicate that WLB is a positive and significant variable in improving job conditions among men and women. For both male and female public officers, higher WLB could also increase job satisfaction. In particular, the marriage variable had a significant moderating effect on female public officers. The effect of WLB was lower for married women than for single women. When WLB was higher than 2.3, which is a little lower than the WLB average (2.668) and other conditions are the same, the effect of WLB on the job satisfaction of a single female public officer was greater than that on a married female public officer. Because marriage increases the burden of unpaid housework for women, the effect of WLB on women's job satisfaction is reduced although this result is not statistically significant. Therefore, we can reject the null hypothesis and accept the hypothesis that for men, marriage has a statistically significant moderating effect on the effect of the level of WLB on job satisfaction.

Our study presupposes that marriage produces an increase in the household labor burden and that this burden affects the effectiveness of WLB and that its impact varies by gender. Since the burden of children is a big part of household labor, we analyzed the effect of the presence of children and preschool children on the effectiveness of WLB (table 8). When we added variables regarding the presence of children first, we found they produced modeling effects that impaired the effectiveness of WLB that were not statistically significant. However, we found a very clear and statistically significant modeling effect when preschool children were present. For women, the impact on WLB's job satisfaction was significantly reduced when there were no preschoolers present. On the other hand, it has been shown that the effect of WLB on job satisfaction is stronger when there are preschoolers in the household. This suggests that the effect of having preschoolers in the household varies according to gender, especially with respect to the effectiveness of WLB. Having preschoolers means that there is a child-rearing burden, and there is a different attitude with respect to accepting that burden depending on gender. In general, if there is an architecture within the home that requires an individu-

al to spend a given amount of time on household chores and child care rather than on himself or herself, it may not have a positive effect on job satisfaction, even there is a high level of WLB. Therefore, it was not possible to reject the null hypothesis when using the presence of children as a moderating variable in relation to the hypothesis that for men, having a child has a statistically significant moderating effect on the effect of the level of WLB on job satisfaction; however, the null hypothesis could be rejected when using the presence or absence of preschoolers as a variable.

Table 8. Regression Results for Each Gender Group

Variables	Female(b/se)				Male (b/se)			
	Result 2-1	Result 2-2	Result 2-3	Result 2-4	Result 3-1	Result 3-2	Result 3-3	Result 3-4
Years of Service	0.005 (0.004)	0.010** (0.005)	0.007 (0.005)	0.006 (0.004)	-0.011** (0.005)	-0.012** (0.005)	-0.010* (0.006)	-0.012** (0.005)
Public Service Motivation	0.288*** (0.059)	0.188*** (0.064)	0.255*** (0.065)	0.268*** (0.061)	0.737*** (0.051)	0.733*** (0.052)	0.739*** (0.052)	0.711*** (0.052)
Position Dummy (Grade Higher than 5 = 1)	0.777*** (0.132)	0.821*** (0.127)	0.812*** (0.134)	0.759*** (0.130)	0.266*** (0.083)	0.279*** (0.084)	0.263*** (0.084)	0.321*** (0.086)
Department Relocation Dummy (Relocated = 1)	0.175** (0.083)	0.157* (0.080)	0.196** (0.083)	0.169** (0.084)	0.177*** (0.060)	0.165*** (0.062)	0.183*** (0.062)	0.193*** (0.061)
WLB	0.287*** (0.070)	0.728*** (0.144)	0.441*** (0.122)	0.290*** (0.088)	0.323*** (0.045)	0.585*** (0.207)	0.241 (0.161)	0.235*** (0.059)
Marital Status Dummy (Married = 1)		1.306*** (0.426)				0.792 (0.596)		
WLB*Marital Status		-0.559*** (0.164)				-0.275 (0.212)		
Child Rearing Dummy (rearing = 1)			0.549 (0.404)				-0.268 (0.460)	
WLB*Child Rearing			-0.234 (0.151)				0.089 (0.167)	
Preschool Child (yes = 1)				0.794 (0.533)				-0.543** (0.251)
WLB*Presence of Preschool Child				-0.408* (0.227)				0.205** (0.090)
Constant	1.092*** (0.279)	0.339 (0.386)	0.798** (0.384)	1.171*** (0.360)	-0.237 (0.191)	-0.955 (0.582)	-0.016 (0.457)	0.075 (0.235)
R-Square	0.500	0.555	0.513	0.524	0.580	0.583	0.581	0.589

Note: * p<0.1, ** p<0.05, *** p<0.01.

CONCLUSIONS

Despite increasing interest in WLB, few studies have examined the effects thereof. Since WLB policies and schemes are currently in place, more related studies are needed to increase their effectiveness. We performed an empirical analysis based on data collected from a questionnaire survey distributed to Korean central government public officers about the effects of WLB on job satisfaction. In Scandinavian countries like Finland and Sweden, which are often considered exemplary models of the welfare state, gender equality in unpaid labor can be attributed to a higher share of public child rearing. The governments of these countries recognize the gender gap in unpaid labor as not just an individual or family problem but also a social one and intervenes through policies. For the purposes of this study, we assumed that public child-rearing services are not available in Korea and that the level of income of public officers is not high enough nor the service market big enough for public officers to hire nannies and babysitters or easily use private child care services.

This study analyzed gender differences and the moderating effect of gender on unpaid labor, taking into account underlying stereotypes about gender roles in the family in Korea. We found gender differences in the correlations between WLB and overtime working hours and between WLB and personal leisure hours. Among men, better WLB demonstrated an inversely proportional relationship to overtime working hours and a proportional relationship to personal leisure hours, both of which were statistically significant. Among women, however, although positive correlations were found, these were not significant.

The level of balance between the amount of time an individual spent working, on the one hand, and engaging in personal leisure activities, on the other, was used to measure WLB, and WLB had a positive and statistically significant effect on job satisfaction. Differences in the effect of WLB based on gender were not significant. However, the effect differed significantly for men and women in relation to marriage. The effect of WLB was smaller on married female public officers than on those who were single. In other words, the slope of the relationship between WLB and job satisfaction was more rigid for single women than married women. This result was statistically significant. Regarding child-rearing, there was a negative moderating effect for women with children, although this was not statistically significant.

Our results suggest that current WLB policies need to be modified, focusing on gender division of labor. While we were not able to verify that the smaller effect of WLB on married women stems from the disproportionate allocation of unpaid

labor to women, this is a possible reason for it. It therefore makes sense to consider The effect of the household work burden that is constituted by marriage and child care when developing policies for WLB.

In WLB policy setting in a work-oriented society such as Korea, it is necessary to consider whether less hours working is de facto linked to more time spent on one's personal life. Gender differences related to actual individual time use can hamper WLB policies, which grant men and women the same number of hours to devote to their personal lives on the assumption that there is gender equality. But in Korea, a patriarchal culture that creates unequal housework burdens between men and women is one of the limiting factors in the effectiveness of WLB policies. Therefore, the government needs to pay more attention to these problems and to focus on housework burden sharing. For example, in determining WLB policy, decision makers need to recognize women who are burdened with housework and child care as important stakeholders and need to strengthen support for unpaid work, which in turn will lead to a change in perception of male housework.

Since this study examined public officers employed in the central government, the questionnaire survey sample was not necessarily representative of all types of ministries or officers. Some ministries have shown significant differences in job satisfaction, but there are limitations to analyzing what characteristics such departments have, and we did address them in this study. Investigating the characteristics of each department together and including them in an analysis as well measuring how much time individuals spend doing housework and rearing children would be productive for future studies. From such studies more specific policy implications can be derived to improve the effect of WLB policies.

REFERENCES

- Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. 2000. Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, 5(2): 278-308.
- Andersen, L. B., & Kjeldsen, A. M. 2013. Public service motivation, user orientation, and job satisfaction: A question of employment sector? *International Public Management Journal*, 16(2): 252-274.
- Bae, K. B., & Goodman, D. 2014. The influence of family-friendly policies on turnover and performance in south korea. *Public Personnel Management*, 43(4): 520-542.
- Benito-Osorio, D., Muñoz-Aguado, L., & Villar, C. 2015. The impact of family and

- work-life balance policies on the performance of Spanish-listed companies. *Management*, 17(4): 214-236.
- Bloom, N., Kretschmer, T., & Van Reenen, J. 2011. Are family-friendly workplace practices a valuable firm resource? *Strategic Management Journal*, 32(4): 343-367.
- Brines, J. 1994. Economic dependency, gender, and the division of labor at home. *American Journal of Sociology*, 100(3): 652-688.
- Bright, L. 2007. Does person-organization fit mediate the relationship between public service motivation and the job performance of public employees? *Review of Public Personnel Administration*, 27(4): 361-379.
- Campbell, J. W., & Im, T. 2016. PSM and Turnover Intention in Public Organizations. *Review of Public Personnel Administration*, 36(4), 323-346.
- Cantarelli, P., Belardinelli, P., & Belle, N. 2016. A meta-analysis of job satisfaction correlates in the public administration literature. *Review of Public Personnel Administration*, 36(2): 115-144.
- Cho, J., Lim, C., & Lee, J. S. 2010. Gender and job turnover in the dual labor market: A Korean perspective, *Asian Journal of Women's Studies*, 16(1): 91-124.
- Chou, K. L., & Cheung, K. C. K. 2013. Family-friendly policies in the workplace & their effect on work-life conflicts in Hong Kong. *The International Journal of Human Resource Management*, 24(20), 3872-3885.
- Christensen, R. K., Paarlberg, L., & Perry, J. 2017. Public service motivation research: lessons for practice. *Public Administration Review*, 77(4): 529-542.
- Clark, S. C. 2000. Work/family border theory: A new theory of work/family balance. *Human Relations*, 53(6): 747-770.
- Cho, T., & Faerman, S. R. 2008. Comparing employee attitudes towards individualism-collectivism across public and private sector organizations. *Korean Journal of Policy Studies*, 23(1):19-47.
- Crouter, A. C. 1984. Spillover from family to work: The neglected side of the work-family interface. *Human Relations*, 37(6): 425-441.
- da Silva Timossi, L., Pedroso, B., de Francisco, A. C., & Pilatti, L. A. 2008. Evaluation of quality of work life: An adaptation from the Walton's QWLbd model. Paper presented at the 14th International Conference on Industrial Engineering and Operations Management, Rio de Janeiro, October 13-16.
- Davidson, M., & Cooper, C. 1983. *Stress and the woman manager*. Oxford, UK: Martin Robertson.
- Hossain, D. M., & Rokis, R. 2014. Working women's strategy for work-care balance: The case of University of Dhaka, Bangladesh. *Asian Journal of Women's Studies*, 20(3): 77-104,

- Downes, C., & Koekemoer, E. 2011. Work-life balance policies: Challenges and benefits associated with implementing flexitime. *SA Journal of Human Resource Management*, 9(1), 1-13.
- Gershuny, J. 2003. *Changing times: Work and leisure in post-industrial society*. Oxford: Oxford University Press.
- Gordon, J. R., Whelan-Berry, K. S., & Hamilton, E. A. 2007. The relationship among work-family conflict and enhancement, organizational work-family culture, and work outcomes for older working women. *Journal of Occupational Health Psychology*, 12(4): 350-364.
- Greenblatt, E. 2002. Work/life balance: Wisdom or whining. *Organizational Dynamics*, 31(2): 177-193.
- Greenhaus, J. H., & Beutell, N. J. 1985. Sources of conflict between work and family roles. *Academy of Management Review*, 10(1): 76-88.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. 2003. The relation between work-family balance and quality of life. *Journal of Vocational Behavior*, 63(3): 510-531.
- 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.
- Greenstein, T. N. 2000. Economic dependence, gender, and the division of labor in the home: A replication and extension. *Journal of Marriage and Family*, 62(2): 322-335.
- Grout P. A. 1984. Investment and wages in the absence of binding contracts: A Nash bargaining approach. *Econometrica*, 52(2): 449-460.
- Guest, D. E. 2002. Perspectives on the study of work-life balance. *Social Science Information*, 41(2): 255-279.
- Haar, J. M., Russo, M., Sune, A., & Ollier -Malaterre, A. 2014. Outcomes of work-life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. *Journal of Vocational Behavior*, 85(3): 361-373.
- Han, S. K., & Moen, P. 1999. Work and family over time: A life course approach. *Annals of the American Academy of Political and Social Science*, 562(1): 98-110.
- Hur, J.-Y., & Lee, G. 2015. A study on the effect of relocation of workplace on public managers' job turnover intention with a focus on the moderate effect of relocation to Sejong City. *Korean Journal of Public Administration* 24(3): 65-90.
- Jung, K., Moon, M. J., & Hahm, S. D. 2007. Do age, gender, and sector affect job satisfaction? Results from the Korean labor and income panel data. *Review of Public Personnel Administration*, 27(2): 125-146.
- Kim, C.-W., & Park, J.-Y. 2008. Creating a work-life balance scale. *Journal of Leisure Studies*, 5(3): 53-69.
- Kim, C.-W., Park, J. -Y., Sohn, Y. -M., & Jang, Hoon. 2005. Understanding the work-

- life balance and its effectiveness. *Journal of Leisure Studies*, 2(3): 29-48.
- Kim, H.-Y., Oh, H.-G., & Park, S.-M. 2015. An empirical study on the effects of family-friendly policies on work-family conflict in public and private organizations with a focus on the moderating role of instrumental and emotional support from family. *Korean Public Administration Quarterly*, 27(2): 483-513.
- Kim, H.-Y., & Park, S.-M. 2017. An empirical exploration of the effects of internal and external organizational conflicts on quality of life and organizational citizenship behavior with a focus on positive psychological capital within Korean executive agencies. *Korean Review of Organizational Studies*, 14(1): 27-65.
- Kim, J.-Y., Park, S.-U., & Ji, H.-J. 2011. An empirical study on the relationships among work-life balance, job satisfaction, and turnover intention. *Korean Journal of Human Resources Development*, 14(1): 1-29.
- Kim, J., & Wiggins, M. E. 2011. Family-friendly human resource policy: Is it still working in the public sector? *Public Administration Review*, 71(5): 728-739.
- Kim, S. 2000. The effect of participative strategic planning process on job satisfaction: The experience of local government agencies. *Korean Journal of Policy Studies*, 15(2): 41-55.
- Kirchmeyer, C. 2000. Work-life initiatives: Greed or benevolence regarding workers' time? In C. L. Cooper and D. M. Rousseau (eds.), *Trends in Organizational Behavior* (vol. 7, pp. 79-94). New York: Wiley.
- Ko, J., & Hur, S. 2014. The impacts of employee benefits, procedural justice, and managerial trustworthiness on work attitudes: Integrated understanding based on social exchange theory. *Public Administration Review*, 74(2): 176-187.
- Ko, J., Hur, S., & Smith-Walter, A. 2013. Family-friendly work practices and job satisfaction and organizational performance: Moderating effects of managerial support and performance-oriented management. *Public Personnel Management*, 42(4): 545-565.
- Lee, J. 2004. Taking gender seriously: Feminization of nonstandard work in Korea and Japan. *Asian Journal of Women's Studies*, 10(1): 25-48.
- Lee, J., & Cheon, B. Y. 2009. Career aspirations of women in corporate management: The case of South Korea. *Asian Journal of Women's Studies*, 15(3): 60-80.
- Lee, S-H. 2016. Has childcare become less of a burden in South Korea? Exploring the nature of pre-and post-reform childcare provision. *Asian Journal of Women's Studies*, 22(4): 414-442.
- Lee, S. M., & Kwon, H. J. 2016. Applying regression discontinuity design to social policy: An evaluation of the welfare-to-work program in South Korea. *Korean Journal of Policy Studies*, 31(1): 1-29.
- Lee, S. Y., & Hong, J. H. 2011. Does family-friendly policy matter? Testing its impact

- on turnover and performance. *Public Administration Review*, 71(6): 870-879.
- Madsen, S. R. 2003. The effects of home-based teleworking on work-family conflict. *Human Resource Development Quarterly*, 14(1): 35-58.
- Meyer, J. P., & Allen, N. J. 1991. A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1):s 61-89.
- Meyer, J. P., & Allen, N. J. 1984. Testing the side-bet theory of organizational commitment: Some methodological considerations, *Journal of Applied Psychology*, 69(3): 372-378.
- Min, K.-R., and Park, S.-M. 2013. Probing the impacts of flexible work schedules on organizational outcomes with a focus on the moderating role of reform values in public organizations. *Korean Public Administration Quarterly*, 25(4): 1211-1249.
- Moon, K. M., & Lim, D. W. 2009. Evaluation of law: The parental leave clauses in the Act on Equal Employment and work-family compatibility. *Korean Journal of Policy Studies*, 24(2): 25-45.
- Moon, S.-Y., & Roh, J. 2010. Balancing work and family in South Korea's public organizations: Focusing on family-friendly policies in elementary school organizations. *Public Personnel Management*, 39(2): 117-131.
- Morganson, V. J., Major, D. A., Oborn, K. L., Verive, J. M., & Heelan, M. P. 2010. Comparing telework locations and traditional work arrangements: Differences in work-life balance support, job satisfaction, and inclusion. *Journal of Managerial Psychology*, 25(6): 578-595.
- Ng, C. W., & Ng, E. G. H. 2007. Entrepreneurship and leadership: Case studies of female micro-business owners in Hong Kong, *Asian Journal of Women's Studies*, 13(1): 52-73
- Noblet, A. J. & Rodwell, J. J. 2008. Integrating job stress and social exchange theories to predict employee strain in reformed public sector contexts. *Journal of Public Administration Research and Theory*, 19(3): 555-578
- Noor, K. M. 2011. Work-life balance and intention to leave among academics in Malaysian public higher education institutions. *International Journal of Business and Social Science*, 2(11): 240-248.
- Oh, H.-G., & Park, S.-M. 2014. Exploring the effects of work life balance policies on job and life satisfaction with a focus on a moderating role of organizational commitment in public and private organizations. *Korean Public Administration Quarterly*, 26(4): 901-929.
- Park, C.-Y., & Sohn, Y.-M. 2014. A typology of full-time female paid workers' work-life balance using the 2009 Korean Time Survey. *Korea Family Resource Management Association*, 18(2): 75-102.

- Perry-Smith, J. E., & Blum, T. C. 2000. Work-family human resource bundles and perceived organizational performance. *Academy of Management Journal*, 43(6): 1107-1117.
- Pick, D., & Teo, S. 2017. Job satisfaction of public sector middle managers in the process of NPM change. *Public Management Review*, 19(5): 705-724.
- Rantanen, J., Kinnunen, U., Mauno, S., & Tillemann, K. 2011. Introducing theoretical approaches to work-life balance and testing a new typology among professionals. In S. Kaiser, M. Ringlsetter, D. R. Eikhof, & M. Pina e Cunha (eds.), *Creating balance? International perspectives on the work-life integration of professionals* (pp. 27-46). New York: Springer.
- Spencer, D. G., & Steers, R. M. 1981. Performance as a moderator of the job satisfaction–turnover relationship. *Journal of Applied Psychology*, 66(4): 511-514.
- Sprung, J. M., Toumbeva, T. H., & Matthews, R. A. 2015. Family-friendly organizational policies, practices, and benefits through the gender lens gender and the work-family experience. In M. Mills (ed.), *Gender and the work-family experience: An intersection of two domains* (pp. 227-249). New York: Springer.
- Steer, R. M., & Mowday, R. T. 1981. Employee turnover and the post decision accommodation process. In B. M. Shaw & L. L. Cummings (eds.), *Research in organizational behavior* (vol. 3, pp. 1-101). Greenwich, CT: JAI Press.
- Tausig, M., & Fenwick, R. 2001. Unbinding time: Alternate work schedules and work-life balance. *Journal of Family & Economic Issues*, 22(2): 101-119.
- Ungerson, C., & Yeandle, S. 2005. Care workers and work-life balance: The example of domiciliary careworkers. In D. M Houston (ed.), *Work-life balance in the twenty-first century* (pp. 246-262). Basingstoke, UK: Palgrave Macmillan.
- Wadsworth, L. L., & Owens, B. P. 2007. The effects of social support on work–family enhancement and work–family conflict in the public sector. *Public Administration Review*, 67(1): 75-87.
- Weiss, H. M., & Cropanzano, R. 1996. *Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work*. In B. M. Staw & L. L. Cummings (eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews* (vol. 18, pp. 1-74). Amsterdam: Elsevier.