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Original Article

Different Influence of Negative and Positive Spillover between Work and Life on Depression in a Longitudinal Study

Dong-Wook Lee [1], Yun-Chul Hong [1], Hwo-yeon Seo [2], Je-Yeon Yun [3,4], Soo-hyun Nam [5], Nami Lee [5,6,*]

[1] Department of Preventive Medicine, College of Medicine, Seoul National University, Seoul, Republic of Korea
[2] Public Health Medical Service, Seoul National University Hospital, Seoul, Republic of Korea
[3] Seoul National University Hospital, Seoul, Republic of Korea
[4] Yeongeon Student Support Center, Seoul National University College of Medicine, Seoul, Republic of Korea
[5] Human Rights Center, Seoul National University Hospital, Seoul, Republic of Korea
[6] Department of Psychiatry, Seoul National University Hospital, Seoul, Republic of Korea

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ABSTRACT

Background: This study investigated the longitudinal associations between the degrees of positive and negative spillover in work–life balance (WLB) at baseline and reports of depressive mood at a 2-year follow-up in Korean women employees.

Methods: We used a panel study design data of 1386 women employees who participated in the Korean Longitudinal Survey of Women and Families in both 2014 and 2016. Depressive mood was measured using the "10-item Center for Epidemiologic Studies Depression Scale." Associations between the positive and negative spillover in WLB at baseline and reports of new incidence of depressive mood at 2-year follow-up were explored using a multivariate logistic regression model.

Results: Negative spillover in WLB at baseline showed a significant linear association with reports of depressive mood at 2-yearfollow-up after adjusting for age, education level, marital status, number of children, and positive spillover ($P = 0.014$). The highest scoring group in negative spillover (fourth quartile) showed a significant higher odds ratio of 1.95 compared with the lowest scoring group (first quartile; $P = 0.036$).

Conclusion: Positive spillover in WLB showed a U-shaped association with depression. The degrees of positive and negative spillover in WLB among Korean women employees at baseline were associated with new incidence of depressive mood within 2 years. To prevent depression of female workers, more discrete and differentiated policies on how to maintain healthy WLB are required.

1. Introduction

Work–life balance (WLB), important for social well-being and institutional productivity [1,2], has been studied to be related to various mental health issues, including sleep disorders, anxiety, burnout, sickness absence, and substance abuse [3–6]. WLB can be defined as an "individual's" ability to meet their work and family commitments, as well as other nonwork responsibilities and activities [7]. Nonwork activities such as participation within community and family could seem demanding if the burden of dual duties is not shared or divided [8,9]. Keeping stable boundary between these two domains of work and private life, however, might not always be feasible, although conditions of working space and hours are improving.

Along with the increase in women's economic activities, the decrease in wage gap compared with that of men, and the increase in conflicts among mixed roles, women's conflicts between work and private life have been a critical issue for female laborers [10,11]. Although 143 countries around the world guarantee gender equality in their constitutions, women are more vulnerable to conflicts between work and home than men. Even in Finland, where gender equality is relatively well achieved, reports of work-related health problems, such as absenteeism, were higher in women compared with that in men [12,13]. In South

* Corresponding author. Department of Psychiatry, Seoul National University Hospital, Daehak-ro 103, Chongno-gu, Seoul, 03080, Republic of Korea.
E-mail address: nami6107@naver.com (N. Lee).

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Korea, where women's human rights, gender equality, and protection of motherhood have been gradually legalized, gender disparities are still prevalent in workplace and mental health. Social discrepancies between the two gender may explain why women are more vulnerable to conflicts in WLB, whereas biological differences can be related to intrapsychic attributes regardless of social circumstances.

Depression, in particular, with a lifetime prevalence of 10–15% in the general population and its contribution to economic burden [14,15], is significantly associated with the imbalance between work and private life. There are several studies suggesting that workers' negative perspectives on work–life imbalance are related to depression, but the causal association between WLB and depression has not been clearly elucidated [16]. Without clear evidence that work–life imbalance causes depression, interventions focusing on WLB cannot contain practical roadmaps to improve mental health [17].

Contrary to other general stress theories at work, which focus on the stress *per se* without considering the main dimensions of work and private life, we focused on *spillover theory* to highlight the augmentation or depletion between two compartmentalized sectors of daily life, in line with the conservation of resources (COR) theory [18]. Although COR theory deals with human resources *vis a vis* outer stress in one domain, spillover theory dynamically explains how transmission across two domains of home and work influences each other both positively (*positive spillover*) and negatively (*negative spillover*). Spillover theory insists that a person's attitudes, emotions, skills, and behaviors in one domain flow into the other and vice versa, and it can occur in both positive and negative ways [19,20].

Negative spillover indicates that limited resources for managing multiple roles in both the domains could reciprocally induce stress and strain [18,21]. Serious familial conflicts or mishaps may prevent people from focusing on their work, thus impeding their productivity significantly. This phenomenon is called negative spillover. Several studies conducted with working adults in the Netherlands, Australia, Sweden, and the United States have reported a significant association between negative spillover and mental illness, such as depression [22–25].

Positive spillover means that positive aspects of the workplace could enrich life at home and vice versa [26], but only a few studies for their association with depression were investigated. There are some studies showing that positive spillover is more strongly associated with depression than negative spillover among dual-earner couples [27], is associated with negatively related to problematic drinking [28], and can also affect their family members' depression, called "crossover" [29]. However, the association of positive spillover with mental health has yet been studied as sufficient as that of negative spillover. Furthermore, the positive effects of the interaction between work and family have not been studied extensively from a chronological perspective.

Accordingly, in the present study, we attempted to understand these longitudinal effects by examining the positive and negative interactions between work and life. Using spillover theory on the interaction between work and life, we hypothesized that (1) stronger degree of negative spillover in WLB at baseline would be related to higher incidence of depressive mood through a 2-year follow-up and (2) more positive spillover in WLB at baseline would be associated with lower incidence of depressive mood at 2-year follow-up in female employees in Korea. We also tried to identify the demographic variables involved in the process of negative or positive spillover. For evaluating the relationship between WLB and depression, the Korean Longitudinal Survey of Women and Families (KLoWF) data sets of 2014 and 2016 were used.

2. Materials and methods

2.1. Data collection

KLoWF is a panel-designed survey that has been conducted by the Korean Women's Development Institute since 2007. It is a repeated panel survey with nearly 9000 women and a multistage sampling design with stratification for representing Korean women. The survey was conducted by trained interviewers through face-to-face interviews using a computer-assisted personal interview system. The KLoWF questionnaires consisted of three sections: household (family relationship, household income, housing, and consumption), individual (education level, marital status, pregnancy history, childbirth history, and family values), and job (economic activity, job satisfaction level, and knowledge about social insurance). In this study, we used the fifth wave data set surveyed in 2014 and the sixth wave data set in 2016 in the KLoWF panel, with a total of 8399 participants, and we targeted 2763 working women among these participants. Subjects diagnosed with psychiatric and/or chronic diseases, including cardiovascular disease, respiratory disease, and cancer, were excluded (n = 476, 17.2%). After excluding subjects with missing information on demographic variables (n = 721, 26.0%) and subjects with depressive symptoms (10-item Center for Epidemiological Studies Depression Scale [CES-D-10] $\geq$10) at baseline (n = 180, 6.5%), the final sample size was 1386 (50.2%; Fig. 1).

2.2. Items of depressive symptoms

The CES-D-10 (a short form of CES-D-20 developed by the National Institute of Mental Health studies), a widely used instrument for screening depression with its well-recognized reliability and validity [30], was used. The reliability and validity of the Korean version of CES-D-10 were previously reported [31]. Items included in CES-D-10 scale are shown in Supplementary table S1. The frequency of each item of symptoms in the past week was reported using a 4-point Likert scale ranging from 0 ("None of the time") to 3 ("Most of the time"). The total score of CES-D-10 ranged from 0 to 30, and this study used the cutoff value of 10, so that those with a total score of CES-D-10 $\geq$ 10 would be classified into a depressive group [32]. As fifth and sixth wave surveys were performed with a 2-year interval among the same panel participants, in this study, newly developed depressive symptom cases were defined as those who scored CES-D-10 below 10 in the fifth wave and scored 10 points or greater CES-D-10 in the sixth wave.

2.3. Items of WLB and factor analysis

WLB was assessed with 11 questions that addressed spillover between work and private life. These questionnaires were developed through the consensus of experts on women's status reflecting studies from the aspects of social science, economics, and statistics, with reference to the Panel Survey of Income Dynamics (PSID) and the Household Income and Labor Dynamics in Australia (HILDA) survey [33,34]. Questionnaires contained 11 items as described in Supplementary table S2, including "How much does your current work affect your life and/or vice versa?" Each question was rated on a 4-point Likert scale, as "strongly disagree (4)," "disagree (3)," "agree (2)," and "strongly agree (1)."

We tested 11 items measuring WLB using factor analysis with varimax rotation to explore the domain structure. Factors with eigenvalues greater than one and items with factor loading greater than 0.40 using varimax rotation were retained. The internal consistency was evaluated by Cronbach's alpha. In addition, the average scores of items of the retained factors were calculated according to the demographic variables. Supplementary table S3 shows the

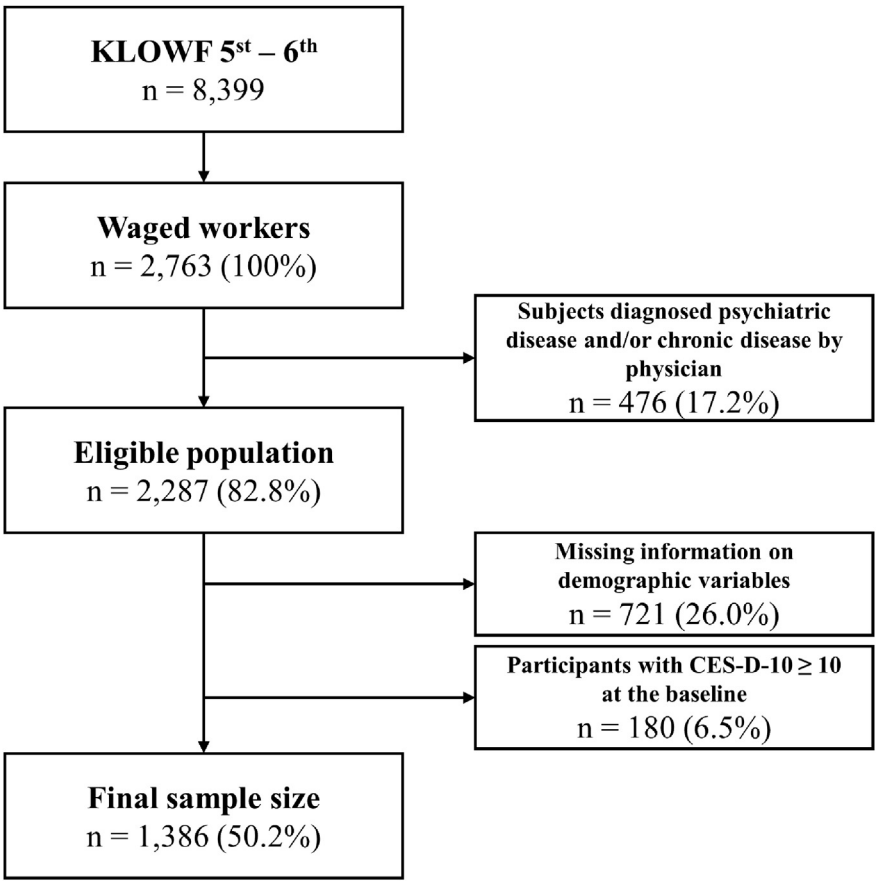

Fig. 1. Depicting the study participants. KLoWF, Korean Longitudinal Survey of Women and Families; CES-D-10, the 10-item Center for epidemiologic studies depression scale.

results of factor analysis and factor loadings for 11 included items for WLB. Two factors with an eigenvalue greater than one were identified. Six items loaded on the first factor (eigenvalue = 2.8) that could be called as "negative spillover," according to the references, limited resources for managing multiple roles in both of the domains could reciprocally induce stress and strain [18,21], are as follows [5]: My long working hours make it difficult to fulfill my domestic obligations [6]; My irregular work schedule makes it difficult to fulfill my domestic obligations [7]; Responsibilities toward family make me work hard [9]; Parenting makes it difficult to stay in the current job [10]; Domestic matters make it difficult to concentrate on my work frequently; and [11] I thought about quitting work to take care of sick family member at home. We found fair internal consistency among items in "negative spillover" factor, as Cronbach's alpha among items in "negative spillover" was 0.793. Four items loaded on the second factor (eigenvalue = 2.2) that could be called as "positive spillover," positive aspects of the workplace could enrich life at home and vice versa [26], are as follows [1]: Work gives meaning and vitality to my life [2]; My family appreciates me for working outside home [3]; My work makes my family life satisfying; and [8] My family's recognition on my job makes me work hard. One item [[4] To work positively affects my children] was excluded, as these items showed a loading factor below .40. The items had good internal consistency reliability, as Cronbach's alpha among the items in "positive spillover" was 0.799.

2.4. Other variables

The demographic variables and other information obtained were age and education level (middle school or below, high school, or college or above), equalized household income (calculated by dividing the income by the square root of a number of household members), marital status (single, married, separated, divorced, or widowed), number of children and job classification (white-collar job and blue-collar job). Information on health behaviors, including smoking status (current-, former-, and never-smoker), frequency of vigorous exercise, and presence of alcohol use disorder, was obtained using the CAGE questionnaire. Those who answered "yes" for at least one question of the CAGE questionnaire were classified into the risk group of alcohol use disorder [35]. Weekly working hours of participants were classified into four groups according to the Labor Standard Act in South Korea as follows: <40 hours (shorter than standard weekly working hours), 40 hours (standard and the most frequent weekly working hours), 41–51 hours (usually permitted overtime work), and ≥52 hours (overtime work allowed in extraordinary situations).

2.5. Statistical analysis

According to the results of the factor analyses, scores of WLB factors were calculated by summing the raw scores of the relevant items, and labels for each factor were given, based on the interpretation of loaded factors. Next, we estimated the association between the quartiles of factors of WLB and newly developed depressive symptoms measured using CES-D-10. We investigated the longitudinal associations and performed multivariate logistic regression analysis between quartiles of scores of WLB factors responded by participants without depressive symptoms in the fifth KLoWF wave in 2014 and their development of depressive symptoms in the sixth KLoWF wave in 2016. We selected potential confounders *a priori* and used directed acyclic graphs to select adjusting variables in the model with DAGitty to draw causal diagrams [36].

Table 1
General characteristics and incident depressive symptoms of the study participants

		Total (fifth wave)	Incident depressive symptom between fifth wave and sixth wave	
		n (%)	n (%)	P^*
Total		1,386 (100.0)	102 (7.4)	
Age (years)	19–29	171 (12.3)	6 (3.5)	0.029
	30–39	299 (21.6)	19 (6.4)	
	40–49	575 (41.5)	40 (7.0)	
	50–59	269 (19.4)	28 (10.4)	
	60–69	72 (5.2)	9 (12.5)	
Education	≤Middle school	163 (11.8)	17 (10.4)	0.279
	High school	529 (38.2)	37 (7.0)	
	≥College	694 (50.1)	48 (6.9)	
Equalized household Income per year (10,000 KRW)	1Q (≤1771)	342 (24.7)	39 (11.4)	0.001
	2Q (1788~2425)	351 (25.3)	28 (8.0)	
	3Q (2449~3291)	343 (24.8)	22 (6.4)	
	4Q (3,300~31,529)	350 (25.3)	13 (3.7)	
Marital status	Single	257 (18.5)	15 (5.8)	0.003
	Married	1005 (72.5)	71 (7.1)	
	Separated	10 (0.7)	0 (0)	
	Divorced	50 (3.6)	12 (24)	
	Widowed	64 (4.6)	4 (6.3)	
Children	No	260 (18.8)	16 (6.2)	0.030
	1	179 (12.9)	20 (11.2)	
	2	695 (50.1)	41 (5.9)	
	3 or more	252 (18.2)	25 (9.9)	
Job classification	White-collar job	715 (51.6)	45 (6.3)	0.117
	Blue-collar job	671 (48.4)	57 (8.5)	
Weekly working hours	<40 h/week	258 (18.6)	20 (7.8)	0.002
	40 h/week	715 (51.6)	38 (5.3)	
	41~51 h/week	259 (18.7)	33 (12.7)	
	≥52 h/week	154 (11.1)	11 (7.1)	
Smoking status	Current smoker	8 (0.6)	1 (12.5)	0.675
	Former smoker	6 (0.4)	0 (0)	
	Never smoker	1372 (99.0)	101 (7.4)	
CAGE score	0	1355 (97.8)	100 (7.4)	0.598
	≥1	31 (2.2)	2 (6.5)	
Vigorous Exercise	<1 per week	1046 (75.5)	80 (7.7)	0.470
	≥1 per week	340 (24.5)	22 (6.5)	

* Chi-squared test or Fisher's exact test was performed.

Included adjusting variables were age, education level, marital status, and number of children (Supplementary figure S1). Three models were constructed: Model 1 was an unadjusted model for each factor; Model 2 was adjusted for age, education level, marital status, and number of children; and in Model 3, all factors derived from the factor analysis were used in the one model all together, with the adjustment of variables used in Model 2. In addition, we investigated the nonparametric association between Z-score from transformation of factor-based scores of WLB and newly developed depression using the generalized additive model with smoothing spline, with the adjustments of same variables of the aforementioned models. All statistical analyses were performed with SAS (version 9.4; SAS Institute, Cary, NC, USA) and R version 3.4.4 (R Foundation for Statistical Computing, Vienna, Austria). Two-tailed P values <0.05 were considered to indicate statistical significance.

3. Results

Table 1 shows the general characteristics of a total of 1386 study subjects in 2014 when the fifth wave of KLoWF survey was performed and the incidence of depressive symptoms between 2 years of follow-up. The mean age and standard deviation of participants was 42.9 ± 10.0 years. Most participants were college graduates or above (n = 694, 50.1%), married (n = 1005, 72.5%), and had two children (n = 695, 50.1%). White-collar job (n = 715, 51.6%) and blue-collar job (n = 671, 48.4%) were evenly distributed. Most participants responded that they worked 40 hours a week (n = 71.5 51.6%). Almost all subjects were nonsmokers (n = 1372, 99.0%) and nonalcoholics (n = 1355, 97.8%), but only less than one-third of the participants exercised regularly (n = 340, 24.5%). Higher prevalence of depressive symptoms was significantly associated with older age, low household income, more children, and longer weekly working hours. Development of depression also significantly differed by marital status: 5.8% and 7.1% among single and married groups, respectively.

Supplementary table 4 shows that groups who experienced higher negative spillover in 2014 (fifth wave) were people aged 19–29 years, educated up to high school, never married, having no child, white collar, and workers who worked less than 40 working hours per week. More positive spillover was found among middle school graduates or less, lower household income, white collar, workers who worked less than 40 working hours per week, and women who exercised more than once per week.

Table 2
Odds ratios for incident depressive symptoms by work–life balance questionnaires using a multivariate logistic regression model

	Total, n (%)	Incident depressive symptom, n (%)	Model 1*		Model 2†		Model 3‡	
			OR (95% CI)	*P*	OR (95% CI)	*P*	OR (95% CI)	*P*
Factor 1 (Negative spillover)								
Q1	340	23 (6.8)	1 (Reference)		1 (Reference)		1 (Reference)	
Q2	423	22 (5.2)	0.76 (0.41–1.38)	0.363	0.74 (0.38–1.42)	0.361	0.77 (0.40–1.48)	0.440
Q3	292	21 (7.2)	1.07 (0.58–1.97)	0.833	1.10 (0.55-2.17)	0.795	1.20 (0.61–2.36)	0.607
Q4	331	36 (10.9)	1.68 (0.97–2.91)	0.062	1.80 (0.96–3.37)	0.069	**1.95 (1.05–3.64)**	**0.036**
P for trend			**0.021**		**0.011**		**0.014**	
Factor 2 (Positive spillover)								
Q1	356	38 (10.7)	1 (Reference)		1 (Reference)		1 (Reference)	
Q2	567	35 (6.2)	**0.55 (0.34–0.89)**	**0.015**	**0.54 (0.33–0.89)**	**0.015**	**0.53 (0.32–0.87)**	**0.012**
Q3	172	8 (4.7)	**0.41 (0.19–0.90)**	**0.025**	**0.42 (0.19–0.93)**	**0.033**	**0.41 (0.18–0.91)**	**0.028**
Q4	291	21 (7.2)	0.65 (0.37–1.14)	0.131	0.65 (0.36–1.16)	0.144	0.69 (0.39–1.24)	0.214
P for trend			0.097		0.106		0.137	

$P < 0.05$ was in bold.
OR, odd ratio; CI, confidence interval; Q1, first quartile; Q2, second quartile; Q3, third quartile; Q4, fourth quartile.
* Model 1: unadjusted model.
† Model 2: adjusted for age, education level, marital status, and number of children.
‡ Model 3: Model 2 + all factors were analyzed in one model.

Table 2 shows the results of associations between work–life imbalance and new development of depression symptoms. The highest scoring group in negative spillover (fourth quartile) showed significant higher odds ratio [OR] of 1.95 (95% confidence interval [CI] = 1.05–3.64) compared with that of the lowest scoring group (first quartile) in Model 3. Nonparametric analysis of negative spillover with newly developed depression showed a linear relationship (Fig. 2). Compared with the lowest quartile of positive spillover group, second quartile (OR = 0.53, 95% CI = 0.32–0.87) and third quartile groups (OR = 0.41, 95% CI = 0.18–0.91) had significant lower OR in Model 3 but fourth quartile did not (OR = 0.69, 95% CI = 0.39–1.24). Nonparametric analysis showed a U-shaped graph, having protective effects for incidence of depressive symptoms below Z-score of 0.5 but showed increased risk of incidence of depressive symptoms after that point (Fig. 2).

4. Discussion

We found significant longitudinal association between work–life imbalance and newly developed depression symptoms. Two factors of WLB, negative and positive spillover, were selected to test the association between WLB and depressive symptoms, after adjusting for age, education level, marital status, and number of children. Negative spillover between work and life was linearly associated with new incidence of depression symptoms, but positive spillover between work and life showed U-shaped association. To the best of our knowledge, this is a novel finding from a longitudinal study of proportional relationship among degree of WLB, spillover phenomena, and new incidence of depression among working women.

Only a few longitudinal studies for WLB and depression have been investigated until now. A longitudinal study in South Korea reported that work disturbance due to family responsibilities was associated with depressive symptoms [37]. Another longitudinal study conducted among dual-earner couples in the United States showed that the individual's WLB, positive spillover, was related with spouses' depression but not related to their own depression [27].

Relatively, there are many cross-sectional studies on the association between WLB and depression, such as German working population [38], Chinese female nurses [39], Chinese bank employees [40], and correction officers in the United States [41]. A study in the United States reported that negative spillover was related to the development of mood, anxiety, and substance dependence [42]. Bergs et al. reported the reciprocal association between depressive symptoms and work–family conflict, assessing negative spillover [22]. A cross-sectional study in Switzerland

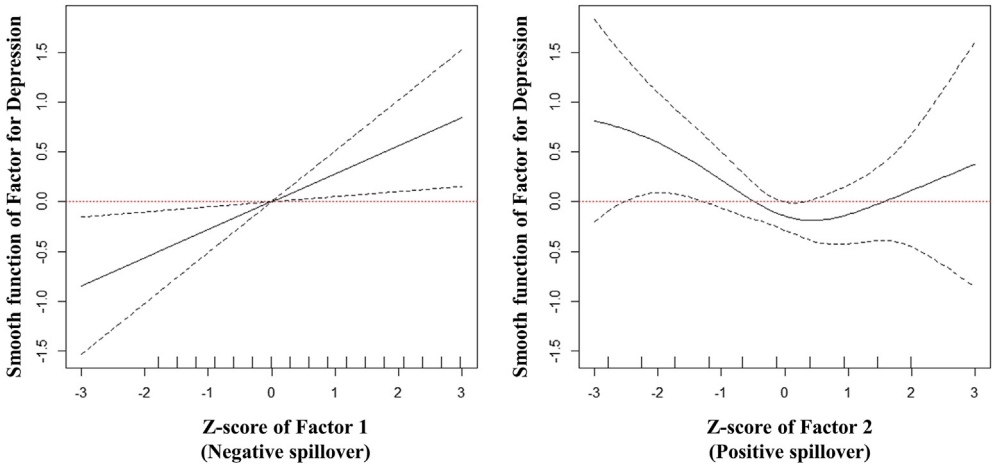

Fig. 2. Nonparametric associations between factors of work–life balance and newly developed depression. All factors were analyzed in one model with the adjustment for age, education level, marital status, and number of children.

reported that subjective spillover between work and life was associated with depressive feeling, especially among female workers [4]. Association between depression and negative spillover phenomena in work–family conflicts was reported among Dutch workers [22]. A cross-sectional study conducted in Switzerland reported similar results among female workers [4]. Consistent to previous studies, we found that negative spillover was linearly associated with the incidence of depressive symptoms.

Negative spillover is induced when people manage various roles both in work and life with limited resources so that it can lead to stress and strain [18,21]. These findings are consistent with previous cross-sectional study examining the association of the subjective time balance between work and life with well-being in South Korea [43]. In our study, *Negative spillover* includes the difficulty to fulfilling domestic obligation due to long work hours or irregular work schedule and the difficulty to concentrate on work due to parenting, caregiving, or domestic matters. These factors are related to overloaded multiple roles, which could result in psychological conflict between work and life and psychological stress [44]. Furthermore, according to COR theory, psychological stress can occur in a possible situation for people to lose the resource even if these losses do not actually occur [18].

Our result showed that positive spillover between work and life could be beneficial for mental health. The positive interaction between work and family has been studied from various perspectives. For instance, a meta-analysis reviewed 21 studies on work–family enrichment and 57 studies on family–work enrichment. Findings revealed that job satisfaction, affective commitment, physical and mental health, and family satisfaction, but not turnover intention, were positively related to work–family conflict [45]. Greenhause and Powell suggested that the hypothetical mechanism of the positive interaction between family and work could be explained by the affective and instrumental pathways. Specifically, people's positive affect and their tendency to value their work or family could be interconnected, and this interaction would in turn enhance their performance [26]. However, these theoretical perspectives have not been supported by statistical and quantitative data.

In our study, depressive symptoms were not significantly associated with the fourth quartile of positive spillover but significantly associated with the second and third quartiles of positive spillover. It is unclear whether too much positive interaction between work and life is detrimental. The present results highlight that being optimistic alone may not guarantee physical and psychological health. Too sheer positive attitudes toward their work and family may push them to work too hard, which lead to psychological stress. Women who moderately experience positive spillover may be able to contain their family life more securely than the first and fourth quartile of positive spillover. It has been widely accepted that positive spillover, where work and life enrich each other, is beneficial for mental health [27]. However, in our study, excessive positive spillover was not found to have desirable effects on depressive symptoms. Given that studies have reported that positive spillover between work and life is associated with workaholism [25,46], and that workaholism is associated with depression [47,48], it is plausible that excess positive spillover could be detrimental to mental health. The COR theory may explain that excessive positive spillover between work and life might paradoxically deplete personal resources and decrease the chance of consultation in the long run. The stress derived from exhaustion could exceed the advantages of positive spillover [18]. This aligns with the results of a previous meta-analysis study that states that higher demands, lower resources, and lower adaptive organizational attitudes are associated with burnout in regard to the COR theory [49]. Furthermore, if respondents of the fourth quartile also actively engaged with work and home, they may have had fewer opportunities to consult psychiatrists compared with loners, thus preventing the early detection of depression in the former. As social isolation increases the risk of being diagnosed with chronic illnesses [50], active social participation at work and home with a positive attitude seems to lower the risk of depression until a certain point. However, our results suggest that the depletion of resources stemming from obscuring the boundary between work and life may result in a tendency to look at life through rose-colored glasses, which would in turn delay intervention seeking behaviors that protect working women from depression.

The following are some strengths of our study. First, the longitudinal study design, which consists of WLB questionnaires at the baseline and incidence of newly developing depressive symptoms through 2 years, supports the causal association of our results. Furthermore, the unique finding that positive spillover also negatively influences the psychological aftermath, contrary to the expectations that negative spillover is detrimental, is also a strength of our study. Second, our results were obtained from national representative data on working women in South Korea, one of the rapidly developed countries where traditional ideologies have collided with modern social norms. Third, we used a validated tool for depressive symptoms (CES-D-10) that offers better sensitivity and specificity than that of nonvalidated assessing methods in relation to WLB. Fourth, different dimensions of WLB categorized using theoretical backgrounds with statistical confirmation provided substantial data for practical strategy.

However, there were several limitations in our study. First, we surveyed WLB using questionnaire of the KLoWF survey that was developed based on PSID and HILDA. Concepts of each item may be different depending on cultures and languages, although the meaningful correlation between spillover and depression was still found. Second, WLB deals with subjective feeling, and a tool for diagnosing disease with objectification of WLB needs to be further studied. Although the individuals' WLB cannot be evaluated without considering their subjective status, well-validated tools for measuring WLB are still demanded for statistical confirmation. Third, our data encompassed only female workers in South Korea. Previous studies argued that the association between WLB and depression could differ by gender [51]. To explore whether there are differences between gender or not, future studies should include male workers. Biological diathesis in gender difference should also be discussed in future research. Finally, because of lack of information on diverse occupational stresses, such as high job demand, lack of rewards, interpersonal conflicts, and inadequate social support, possible confounding effects in the workplace were not clarified.

Negative spillover in WLB is associated with the increase in developing depressive symptoms, and positive spillover in WLB is associated with the decrease in developing depressive symptoms with U-shaped relationship among South Korean women employees. Maintaining sound boundaries between work and life is necessary for WLB and preventing depression.

Availability of data and materials

The data sets generated and/or analyzed during the present study are available in the Korean Longitudinal Survey of Women and Families repository, https://klowf.kwdi.re.kr/portal/eng/dataSet/rdssFileEngListPage.do?

Conflicts of interest

The authors report no conflicts of interest.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.shaw.2021.05.002.

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