Work-Family Conflict and Depression for Employed Husbands and Wives in Japan: Moderating Roles of Self and Spousal Role Involvement

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Abstract

Regardless of the difficulty in balancing work and family in Japan, few studies have examined the relationship between work-to-family conflict (WFC) and depression for employed husbands and wives. We investigated the impact of WFC on husbands' and wives' depression, moderating role of own psychological family involvement in the relationship between WFC and depression, and moderating role of spouses' family and job involvement in the relationship between WFC and depression. Using data from a household survey, we first found that the effect of WFC on depression was larger for wives. Next, husbands' and wives' own psychological family involvement did not moderate the relationship between WFC and their depression. Finally, spousal family and job involvement operated as moderator only for husbands. WFC decreased husbands' depression when their wives were highly involved in job psychologically and behaviorally. However, WFC increased husbands' depression when their wives were highly involved in family psychologically and behaviorally.

Introduction

In this study, we investigate the relationship between work-family conflict and depression for employed Japanese husbands and wives. Specifically, we address the following research questions: (1) Does work-to-family conflict (WFC) exert differential impacts on depression for husbands and wives? (2) Do husbands' and wives' own psychological family involvement condition the relationship between WFC and their depression? (3) Do spousal family and job involvement at psychological and behavioral levels play different moderating roles on the relationship between WFC and depression for husbands and wives?

A number of prior studies investigated relationships between work-family conflict and depression (e.g., Frone, Russel, & Barnes, 1996; Frone, Russel, & Cooper, 1997; Grzywacz & Bass, 2003; Schieman, McBrier, & Van Gundy, 2003; Stephens, Franks, & Atienza, 1997; Vinokur, Pierce, & Buck, 1999). In general, the findings show that employees who undergo extensive work-family conflict experience high levels of depression. Moreover, research has illuminated that both directions of conflict (work-to-family & family-to-work) are associated with depression. However, the vast majority of these studies were conducted using Western samples, while very little empirical work in non-western societies like Japan, has investigated the relationship.

Japanese economy has undergone a significant change over the last 20 years. Due to the societal aging and declining birth, the economy is no longer sustainable without women's labor force participation. In 2010, women constituted 42.6% of Japanese employees (Statistics Bureau, 2011). Note, however, that a larger proportion of Japanese female employees (53.6% in 2010) work in "non-regular jobs," such as part-time and temporary jobs, with unstable employment and inferior working conditions. As a matter of fact, researchers indicate that Japanese women's concentration in the non-regular jobs is one of the major causes of earnings gap between genders (Osawa, 2006; Yamaguchi, 2008).

While Japanese labor markets continue to be stratified by gender, an increase of married women and mothers of young children in the labor force has brought about a change

in workers' attitudes towards work and personal life and in their need for employer assistance in family care. Today, Japanese workers demand more flexible work arrangements that enable accommodation of family needs to employment. Provision of family-friendly policies is increasingly becoming important for Japanese employers to remain competitive by recruiting and retaining committed, productive workers (Sato & Takeishi, 2008). Nevertheless, still a number of employed women and men suffer from difficulty in striking a balance between the competing demands of paid work and family (Cabinet Office, 2006). We have very limited knowledge as to how work interference with family life affects the quality of workers' personal life. Thus, there is a pressing need for illuminating the consequence of women and men's inability to balance work and family life, and to explore whether and how experiencing work-family conflict affects their psychological well-being.

Theoretical Framework & Hypotheses

We draw on Hobfoll's (1989, 2001) Conservation of Resources (COR) theory to framework the relationship between work-family conflict and depression, and the potentially moderating roles of family and job involvement on this relationship. It is argued in COR theory that individuals attempt to acquire and maintain resources, and that they experience stress when there is a threat of a loss of resources, an actual loss in resources, or lack of expected gain in resources. According to Hobfoll (1989), resources in COR theory are objects, conditions, personal characteristics, and energy that are valued by the individual. Perhaps work-family conflict in COR classification of resources would best be understood as a threat of or an actual loss in a set of valued resources that include time, money, and knowledge (Hobfoll, 1989).

Note that when an individual incumbents in multiple social roles, a relative value of resources in different role domains has to be taken into account. We argue that the degree of importance attached to resources in family domain varies among individuals. Work-to-family conflict (or interference of work in family life) is likely to be stressful particularly when one places a higher value on family resources. For such an individual work-to-family conflict is a

threat of or an actual loss of personally valued resources in the family domain, and therefore it is likely to result in an increased level of stress. In contrast, work-to-family conflict may not be so stressful for persons who view family resources less important or valuable. While work-to-family conflict still may be a threat or an actual loss of family resources, since the threatened or lost resources are less valuable for them, an experience of conflict between work and family is less likely to increase the level of their stress.

Over a long period, Japanese employed husbands have been stereotyped that their primary identification is in the breadwinning, so that they concentrate on paid work while relegating most of the domestic responsibilities to their wives. Yet, we argue that Japanese husbands' role identity has been diversifying in recent times. Accommodation of family needs to employment is increasingly becoming important for Japanese employees regardless of gender. The rising consciousness of work-life balance and a greater demand for family-responsive policies among Japanese employed men and women is a sign of their changing attitudes toward work and personal life. Therefore, we expect to observe more diversity in the extent to which Japanese husbands attach importance to family life. Therefore, work-to-family conflict is likely to exert differential impact on husbands' stress depending on the level of importance they attach to their family lives.

In contrast, Japanese women have been portrayed stereotypically as housewives with strong identification in the family care role. We believe that their role identification is also diversifying in today's Japan. Although the fact that a large proportion of Japanese wives work part-time may be interpreted that they still tend to place a relatively higher importance to the family responsibility over paid employment, we argue that part-time employment status is not necessarily a good indicator of family role identification of Japanese employed wives. It has been believed that wives who choose to work part-time do so in an attempt to avoid sacrificing their family responsibilities. However, given the persistent gender stratification in Japanese labor markets, a growing number of women opt to work part-time because they have few other employment options. Thus, we do not expect that Japanese employed wives attach uniformly high importance to their family responsibility, but rather we

expect to observe diversity in family role identification among those wives. Therefore, like Japanese husbands, work-to-family conflict for wives is likely to exert differential impact on their stress depending on the level of importance they attach to their family life.

The notion of involvement is relevant to the discussion of importance husbands and wives attach to their family life. Involvement refers to the time and psychological energy persons devote to social roles (Friedman & Greenhaus, 2000). Some roles are more central to individuals' self-concept than are other roles, and therefore people are more likely to invest themselves in the role they are involved and participate extensively in role-related activities. For instance, when people are highly involved in work, career tends to be viewed as life role priority, and they tend to spend less time on family, take less time off for children, and make less adjustment of work schedule for family. In contrast, when people are highly involved in family, they are more likely to give priority to family as life role. They tend to engage in family responsibilities more extensively, try to avoid long hours of work, make more adjustment of work schedule for the family, while taking fewer developmental assignments. Necessarily, the level of involvement in work and family affects the extent to which an individual provides support for their family. Thus, it is expected that people provide different levels of support for their partners depending on the level of involvement in family and work.

Based on the COR conceptualization, we argue that receiving spousal support in the identity role domain helps in preserving an individual's valued resources, while buffering the negative effect of work-to-family conflict on depression. A spouse who is involved in family role is more likely to provide behavioral support for his/her partner. Then, a spouse who receives behavioral support tends to gain time and flexibility at home that could be used to preserve energy in family domain. Psychological support from spouses provides information, guidance, and acceptance that help partners build self-esteem and confidence (Friedman & Greenhaus, 2000) that increase one's capacity to better cope with work-family conflict. Thus, we predict that spousal family involvement at behavioral and psychological levels will mitigate the impact of work-to-family conflict on depression. In contrast, spousal work involvement suggests that less support is provided for his/her partner. The scarcity of spousal

support is more likely to lead to the loss of valued family resources, resulting in an increased likelihood of work-to-family conflict. Thus, spousal work involvement should deteriorate the impact of work-to-family conflict on depression.

Although the stereotype for Japanese husbands as breadwinner has been weakening, long working hours (i.e., overtime work) is still common in the society, particularly for men. That is part of the reason for larger gender gap in hours spent on housework and childcare in Japan, compared to many other industrialized nations. As family orientation becomes more diverse, there might be Japanese employed husbands who hope to be actively involved in family life but their work interferes with it. For those husbands, wives' family involvement would play a significant role in reducing the loss of valued family resources. However, when wives are also employed, husbands are less likely to receive support from wives. For Japanese employed wives, it is quite possible that their family role identification has also become diverse, as described above. Thus, husbands' family involvement would moderate the impact of wives' work-to-family conflict on their depression. When their husbands are highly involved in work, it becomes less likely that these wives receive husbands' support for family domain, resulting in increased depression.

Given these arguments, we formulate the following hypotheses.

Hypothesis 1: Work-to-family conflict (WFC) increases depression for Japanese husbands and wives.

Hypothesis 2: The positive effect of work-to-family conflict (WFC) on depression for husbands will be stronger when their psychological family involvement is high.
Similarly,
Hypothesis 3: The positive effect of work-to-family conflict (WFC) on depression for wives will be stronger when their psychological family involvement is high.

Hypothesis 4: The positive effect of work-to-family conflict (WFC) on depression for husbands will be weaker when their wives are highly involved in family both psychologically and behaviorally.

Similarly,

Hypothesis 5: The positive effect of work-to-family conflict (WFC) on depression for wives will be weaker when their husbands are highly involved in family both psychologically and behaviorally.

Hypothesis 6: The positive effect of work-to-family conflict (WFC) on depression for husbands will be stronger when their wives are highly involved in job both psychologically and behaviorally.

Similarly,

Hypothesis 7: The positive effect of work-to-family conflict (WFC) on depression for wives will be stronger when their husbands are highly involved in job both psychologically and behaviorally.

Data and Methodology

The data used in this study come from a survey conducted by the first author in 2002 in collaboration with Satoru Yoshida and Kei Suemori. Samples were taken from those residing in two wards of metropolitan Tokyo (Nerima and Itabashi). The questionnaires were distributed to a total number of 2,944 households. We prepared separate questionnaires for husbands and wives, and they were asked to respond individually. The number of households that returned both husband's and wives' questionnaires was 494 (response rate of 16.8%). Sample of our study is limited to husbands and wives whose spouses are also employed (i.e., dual earners), and the total sample size is 297 husbands and 297 wives.

Dependent Variable: Depression

Depression was measured by using 19 items taken from the Japanese version of

Zung's (1965) Self-reporting Depression Scale (SDS, see Fukuda & Kobayashi, 1983). Respondents were asked to answer 19 separate questions regarding their recent mental state in a Likert-format response scale (1=hardly ever, … 4=always). Item statements included, for example, "I feel down and melancholy," "I cry or feel like crying," "I cannot sleep at night," "I feel restless and cannot settle down," etc. In the present analysis, the average of these 19 items was computed and used as a scale. Reliability coefficient Alpha was .754 for wives, and .784 for husbands. SDS is commonly used for measuring symptoms of depression and is confirmed to have consistent validity and reliability (Inaba, 1995).

Focal Independent Variable (1): Work-to-Family Conflict

Work-to-family conflict (WFC) was measured by using husbands' and wives' responses regarding the three conflict dimensions of "time," "strain" and "behavior," for a total of nine items based on the scale constructed by Carlson et al. (2000). Sample items are: "My work prevents me from spending enough time with my family," "There are often times I am so tired after returning home from work that I do not feel like doing anything," "The way I behave at work to facilitate efficiency are not very useful in resolving my family problems."

A four-point Likert scale that ranges from "1=strongly disagree" to "4= strongly agree" was used as a response scale for each item. Combined scale of the three dimensions of conflict were created and used in the present analysis. The reliability coefficients were .793 for husbands' work-to-family conflict and .822 for wives' work-to-family conflict.

Focal Independent Variable (2): Psychological Family Involvement (Self)

To tap levels of respondents' own psychological family involvement, we computed the unweighted average of the five items: Item statements included, for example, "My family is extremely important to me ("1= strongly disagree" to "4=strongly agree")," "Family plays the central part in my life," and "I am deeply involved in my family." Cronbach's Alpha of the scale was .830 for husbands and .775 for wives.

Focal Independent Variables (3): Spousal Family and Job Involvement

Spouses' family and job involvement were captured at both psychological and behavioral level. First, item statements included as spouses' psychological family involvement are identical to the five items included as respondents' own family involvement, just described in the previous section. Spouses' behavioral family involvement was measured by a scale created by the unweighted mean of eleven items. Respondents were asked, "Concerning housework and childcare, how often do you do the following activities?" Activities included, for example, preparing meals, cleaning the house, having conversation with spouse, or having dinner with children. Response categories ranged from "1= hardly" to "4=always." Cronbach's Alpha of the scale was .822 for husbands and .723 for wives. Next, spouses' psychological job involvement was measured by a scale which was the unweighted mean scores of five items. Item statements included, for example, "Work plays the central part in my life," "My work is extremely important to me," and "I am deeply involved in my work." Response categories ranged from "1= strongly disagree" to "4=strongly agree." Cronbach's Alpha of the scale was .725 for husbands and .759 for wives. Finally, spouses' behavioral job involvement was measured by hours of work per week. Note that we used slightly different definition for husbands and wives. For husbands, those who work 50 hours or more per week were considered as highly involved in job. For wives, those who work 40 hours or more per week were considered to be highly involved in job.

Control Variables:

As controls, we included respondents' demographic characteristics such as age (husbands' average=44.47, wives' average=42.28), years of education (husbands' average=14.78, wives' average=13.89), number of children (average=2.03), age of youngest child (average=6.50), wives' employment status (1=non-regular, 0=regular, 71.1% non-regular), weekly days of work (husbands' average=5.29, wives' average=4.26), and annual income (husbands' average=7.38 mil. yen, wives' average=2.04 mil. yen, note: 1 million yen is approximately equivalent to 10,000 U.S. dollars, authors' calculation). In

regression analyses, we utilized annual household income by adding husbands' and wives' annual income. We also included four characteristics of respondents' jobs; job ambiguity (husbands' average=2.04, wives' average=2.10), role conflict at work (husbands' average=2.37, wives' average=2.16), work overload (husbands' average=2.75, wives' average=2.39), and job complexity (husbands' average=2.85, and wives' average=2.49).

Analytic Strategy

First, descriptive statistics for all the variables are presented separately for husbands and wives. Then, a series of t-tests are conducted to examine whether there are significant differences in mean scores for variables between husbands and wives. After that, sets of Ordinary Least Squares (OLS) regression models are estimated to examine (1) whether WFC exerts differential impacts on depression for husbands and wives, (2) whether husbands' and wives' psychological family involvement has a moderating effect on the relationship between their WFC and depression, and (3) whether spousal family and job involvement at psychological and behavioral levels play different moderating roles on the relationship between WFC and depression for husbands and wives. In order to test (2) and (3), just described above, we enter interaction terms into the models. Interactions terms are created with z-scored main variables. However, main effects are entered into models as not z-scored forms since our preliminary analyses shows that results does not differ when we use z-scored main effects or non-z-scored main effects. Control variables are included in all regression models.

Results

Descriptive Results

Table 1 shows descriptive statistics for all the variables used in this study. Results of t-tests indicating gender differences in mean scores for variables are also shown on the same table. First, husbands and wives in the present sample experienced relatively low levels of depression. Mean scores for depression were 1.97 for husbands and 2.06 for wives (ranges

1-4). Although the levels of depression were relatively low for both husbands and wives, wives were significantly more depressed than husbands. As to work-to-family conflict (WFC), the mean score of husbands' WFC (2.21) was slightly but significantly higher than that of wives (2.10). The mean score for psychological family involvement was 3.08 for husbands and 3.37 for wives, and the difference was statistically significant. Similarly, the mean score of behavioral family involvement for wives (3.15) was significantly higher than that of husbands (2.30). Therefore, wives' family involvement was significantly higher than husbands, both psychologically and behaviorally. On the other hand, husbands were more involved in work, compared to wives. The mean score for psychological job involvement was 2.81 for husbands and 2.37 for wives, and the difference was significant. Finally, about 47% of husbands worked 50 hours or more per week, while slightly less than 20% of wives worked 40 hours or more per week.

Multivariate Results

Table 2 shows results of OLS regression models predicting moderating role of family involvement (self) on the relationship between work-to-family conflict (WFC) and depression. In the table, unstandardized coefficients are shown, and standard errors are shown in the parentheses below each coefficient. First, Model 1 indicates that there was a positive relationship between husbands' WFC and their depression, controlling for other factors. Similarly, wives' WFC was positively associated with their depression, holding other variables constant (Model 3). Models 1 and 3 indicate that, husbands and wives with a stronger sense of work-to-family conflict were more likely to be depressed, compared to those with a weaker sense of work-to-family conflict. Thus, our Hypothesis 1 was supported. However, the effect of WFC on depression was somewhat larger for wives, compared to husbands. Next, for both husbands and wives, psychological family involvement (self) was negatively associated with depression, controlling for other factors (Model 1 and 3). Hence, those who were highly involved in family were less likely to be depressed, compared to those who were not highly involved in family. Then, we examined whether WFC interacted with

husbands' and wives' own family involvement. However, we found that husbands' and wives' own family involvement did not moderate the relationship between work-to-family conflict and depression (Models 2 and 4). Therefore, our Hypotheses 2 and 3 were not supported.

Table 3 demonstrates results of a set of OLS regression models predicting moderating role of wives' family and job involvement on the relationship between husbands' WFC and their depression. Throughout the models (Model 1 to Model 8), husband's WFC was positively and significantly associated with their depression, controlling for other factors. Furthermore, husbands' psychological family involvement was negatively related to their depression. This suggests that husbands who were highly involved in family were less likely than those who were not highly involved in family to be depressed, controlling for spousal family and job involvement, along with other control variables. Now, we move to discuss results of each model. First, the relationships between wives' psychological family involvement and husbands' depression were examined in Models 1 and 2. Model 1 shows that wives' psychological family involvement was not significantly associated with husbands' depression, controlling for other variables. In Model 2, we examined whether wives' psychological family involvement moderated the relationship between husbands' WFC and depression. Result shows that husbands' WFC and wives' psychological family involvement positively and significantly interacted. Thus, contrary to our expectation (Hypothesis 4), husbands' WFC increased their depression when their wives were highly involved in family at psychological level.

Next, the relationships between wives' behavioral family involvement and husbands' depression were examined in Models 3 and 4. Results were similar to models on wives' psychological family involvement, just introduced above. For instance, Model 3 indicates that wives' behavioral family involvement was not significantly related to husbands' levels of depression, holding other variables constant. Interaction effect of husbands' WFC and wives' behavioral family involvement on husbands' depression was tested in Model 4. Result shows that husbands' WFC and wives' behavioral family involvement were positively and significantly interacted. Therefore, in contrast to our expectation (Hypothesis 4), husbands'

WFC increased their depression when their wives were highly involved in family at behavioral level.

In Models 5 and 6, we examined the relationships between wives' psychological job involvement and husbands' depression. Controlling for other factors, wives' psychological job involvement was not significantly associated with husbands' depression (Model 5). Nevertheless, Model 6 indicates that husbands' WFC and wives' psychological job involvement were negatively interacted in its effect on husbands' depression. It suggests that husbands' WFC decreased their depression when their wives were highly involved in work psychologically. This is contrary to our expectation (Hypothesis 6).

Finally, the relationships between wives' behavioral job involvement and husbands' depression were examined in Model 7 and 8. Model 7 shows that wives' behavioral job involvement was significantly and negatively associated with husbands' depression, controlling for other factors. Interaction between husbands' WFC and wives' behavioral job involvement was examined in Model 8, and it was significant and negative. Hence, husbands' WFC decreased their depression when their wives were highly involved in work behaviorally. Again, this is contrary to our expectation (Hypothesis 6).

Table 4 shows results of a set of OLS regression models predicting moderating role of husbands' family and job involvement on the relationship between wives' WFC and their depression. Models 1 to 8 indicate that wives' WFC were positively associated with their depression, controlling for other factors. In addition, wives' psychological family involvement was negatively related to their depression, controlling for husbands' family and job involvement, as well as other factors. Model 1 shows that husbands' psychological family involvement was significantly and negatively associated with wives' depression, holding other variables constant. Models 3, 5, and 7 indicate that husbands' behavioral family involvement, as well as husbands' psychological and behavioral job involvement, were not significantly related to wives' depression. Furthermore, none of the interactions between wives' WFC and their husbands' family or job involvement was statistically significant (Models 2, 4, 6, and 8). Thus, husbands' family or job involvement did not moderate the

relationship between wives' WFC and their depression, and our Hypotheses 5 and 7 were not supported.

Therefore, spousal family and/or job involvement played moderating roles in the relationship between WFC and depression only for husbands. Wives' family and job involvement, both at psychological and behavioral level, conditioned the relationship between husbands' work-to-family conflict and their depression. Drawing on the COR framework, it was expected that wives' family involvement would decrease husbands' depression by reducing the loss of family resources. On the other hand, we expected that wives' job involvement would exacerbate husbands' depression because it would not help reducing the loss of family resources. Nevertheless, directions of the effects were opposite to our expectations; husbands' WFC increased their depression when their wives were highly involved in family, while husbands' WFC decreased their depression when their wives were highly involved in job. It is possible that husbands who perceive a sense of work-to-family conflict might feel guilty for not being able to serve their family enough, when their employed wives were deeply involved in family. Perhaps, husbands might not consider their wives' family involvement as something that compensates for their inadequate family role performance. On the other hand, husbands with a sense of WFC might not be depressed more when their wives were highly involved in their work. It could be that those husbands do not feel guilty for their insufficient family involvement because their wives are not highly involved in family either. Wives' WFC, however, did not increase or decrease their depression depending on their husbands' family or job involvement at psychological and behavioral level.

Conclusion and Discussion

The key findings in the present study are as follows. (1) Work-to-family conflict exerted significant positive influence on depression for both husbands and wives. (2) Husbands and wives who were highly involved psychologically in their family role were less likely to experience depression. (3) Being involved psychologically in family life did not

increase the positive impact of work-to-family conflict on depression for both husbands and wives. (4) When wives were highly involved in their family role both behaviorally and psychologically, the positive impact of husbands' work-to-family conflict on depression was stronger. (5) Husbands' work-to-family conflict reduced their depression when their wives were highly involved in work both behaviorally and psychologically. (6) We found no moderating effect of husbands' family or job involvement on the relationship between wives' work-to-family conflict and their depression. Thus, the present results supported only partially the predictions based on Hobfoll's COR conceptualization.

Our findings show that experiencing work-to-family conflict does deteriorate mental health for both Japanese husbands and wives. Work-to-family conflict is likely to be stressful regardless of whether one places a higher importance on family life. It seems that work-to-family conflict is a threat of or an actual loss of resources in the family independent of how much one values his or her family life, and therefore it tends to exert a detrimental impact on mental health for employed husbands and wives.

We predicted based on Hobfoll's COR argument that receiving support from a spouse highly involved in family life should help in preserving one's valued resources in family domain, and that reception of spousal support should buffer the negative effect of work-to-family conflict on depression. We could not substantiate this prediction among Japanese husbands and wives. It may be that the type of family resource that spouses lose as a result of work-to-family conflict is not what a partner's support can compensate. If time, or the sense of having enough time, is the major family resource that work-to-family conflict drains from employed husbands and wives, then spousal support may be of little use in recuperating the time expended in paid work.

Although the detrimental effect of work-to-family conflict was stronger for husbands married to wives with higher family involvement, we did not find this relationship for wives married to husbands highly involved in family life. Surprisingly, husbands' work-to-family conflict ameliorated their mental health when their wives were highly involved in work behaviorally and psychologically. One possible interpretation may be that husbands' sense of

guilt for their wives boosted their depression. As discussed earlier, husbands experiencing work-to-family conflict may feel guilty for not being able to dedicate their time and energy for the family, even when their employed wives are devoting themselves in the family. In contrast, those same husbands may feel less guilty when their wives are highly involved in their work. Because work involvement tends to reduce the level of family involvement (Friedman & Greenhaus, 2000), it is likely that wives highly involved in work are not devoting much time and psychological energy to the family. Thus, it may be that those husbands do not feel guilty about their insufficient family involvement because their wives are not highly involved in family either.

As marriage in the United States has shifted from a relationship based on traditional roles (i.e., men's economic resources and women's domestic work) to companionship and emotional satisfaction over the last few decades (Coontz, 2005; Cherlin, 2004, 2009), Japanese marriage might be experiencing a similar change. More and more married couples are dual earners today, although wives typically work fewer hours than their male counterparts. Along with the change, having a good balance of work and family life has become a significant issue in Japan. In this study, husbands perceived slightly but significantly stronger sense of work-to-family conflict than wives, suggesting that family involvement is becoming more important for men's psychological well-being. Thus, employed husbands would be depressed when they feel that they are not devoting much time and energy to the family compared to their employed wives, due to their work.

Another possible explanation for why work-to-family conflict exerted stronger influence on depression for husbands married to wives highly involved in family is that employed wives' resentment against their husbands may have brought about marital tension between spouses. As our descriptive statistics show, wives are significantly more likely than husbands to be involved behaviorally in the family role. This means that employed wives tend to spend more time engaging in housework and childcare than husbands. Husbands experiencing work-to-family conflict are likely to bring fatigue and stress home from work and, whether they like it or not, they tend not to spend enough time for family participation.

Given the centrality of work in their spouse's life, employed wives, burdened with both paid work and family responsibility, may accumulate the feeling of resent and unfairness towards husbands. Thus, employed wives' negative feeling underlying their family involvement may have resulted in marital tension to increase husbands' depression.

Our study is not without limitations. First, we did not confirm whether a spouse experiencing work-to-family conflict *actually received* support from his/her partner involved in family life. Although we assumed that a spouse involved in family is likely to provide support for their partner, it may not necessarily be that family involvement is readily translated into provision of behavioral and psychological support. In this regard, It is imperative that we explore in our future research whether husbands and wives married to a partner involved in family is *actually receiving* support from their partners.

Second, while we explored how husbands' and wives' family involvement boosts the impact of work-to-family conflict on depression, and how their spouses' family involvement mitigates the relationship, to investigate these relationships we may need to capture one's *relative involvement* in family over work, as opposed to *absolute involvement* in family. We did not look at the extent to which an employed spouse is devoted to family relative to their employment and how it is associated with the spousal conservation of family resources. It may be that the relative amount of time and psychological energy expended in family life over work is more relevant when considering the linkage between role involvement and conservation of family resources.

Furthermore, we were unable to include measures to capture marital dynamics. For instance, marital satisfaction or relationship quality, including tension between spouses, frequency of disagreement or argument, might allow us to understand the relationship between work-to-family conflict and depression better.

Since the data used in our study are not nationally representative, our findings are not readily generalizable at a societal level. However, this study opened up a possibility that an experience of conflict between work and family is likely to deteriorate the psychological well-being of employed husbands and wives in Japan. Furthermore, based on our results we

underscored that spousal relations of Japanese employed husbands and wives is not as simple as typically believed, and thus differences and similarities in the way work and family affects psychological well-being among husbands and wives employed in full-time and part-time jobs deserve further investigation.

Reference

Cabinet Office, Government of Japan, Special Task Force on Declining Birth and Gender Equality. 2006. *Survey on Declining Birth and Gender Equality.*

Carlson, S. D., Kacmar, K. M., & Williams, L. J. 2000. Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior, 56*, 249-276.

Cherlin, A. J. 2004. The deinstitutionalization of American marriage. *Journal of Marriage and Family 66*:848-861. 101

Cherlin, A. J. 2009. The marriage-go-round: The state of marriage and the family in America today. Alfred A. Knopf. New York: New York.

Coontz, S. 2005. Marriage, a History: How Love Conquered Marriage. Penguin Books. London. England

Frone, M. R., Russell, M. & Barnes, G. M. 1996. Work-family conflict, gender, and health-related outcomes: A study of employed parents in two community samples. *Journal of Occupational Health Psychology, 1*, 57-69.

Frone, M. R., Russell, M. & Cooper, M. L. 1997. Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology, 70*, 325-335.

Friedman, S. D., & Greenhaus, J. H. 2000. Work and Family – Allies or Enemies?: What Happens when Business Professionals Confront Life Choices. New York, NY: Oxford University Press.

Fukuda, K. & Kobayashi, S. 1983. User's Manual for SDS Japanese Version, Tokyo: Sankyobo.

Grzywacz, J. G., & Bass, B. L. 2003. Work, family, and mental health: Testing different models of work-family fit. *Journal of Marriage and Family, 65*, 248-262.

Hobfoll, S. E. 1989. Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513-524.

Hobfoll, S. E. 2001. The influence of culture, community, and the nested-self in the stress

process: Advancing conservation of resources theory. *Applied Psychology: An International Review, 50*, 337-370.

Inaba, A. 1995. Psychological distress for married women. Sogo Toshi Kenkyu (General Urban Studies), 56, 93-111.

Osawa, M. 2006. Toward a Work-Life Balance Society. Tokyo: Iwanami Shoten.

Sato, H. & Takeishi, E. (Eds.) 2008. People-Utilizing Firms Grow: Work-Life Balance as Human Resource Strategy, Tokyo: Keiso Shobo.

Statistics Bureau, Ministry of Internal Affairs and Communications, Government of Japan. 2011. *Labour Force Survey.*

Schieman, S., McBrier, D. B., & Van Gundy, K. 2003. Home-to-work conflict, work qualities, and emotional distress. *Sociological Forum, 18*, 137-164.

Stephens, M. A. P., Franks, M. M., & Atienza, A. A. 1997. Where two roles intersect: Spillover between parent care and employment. *Psychology and Aging, 12*,30-37.

Vinokur, A. D., Pierce, P. F., & Buck, C. L. 1999. Work-family conflicts of women in the Air Force: Their influence on mental health and functioning. *Journal of Organizational Behavior, 20*, 865-878.

Yamaguchi, K. 2008. Gender equality and work-life balance: Routes to dissolving statistical discrimination. In K. Yamaguchi and Y. Higuchi (Eds.), Work-Life Balance in Japan, Tokyo: Nippon Keizai Shimbun Press.

Zung, W. W. 1965. A self-reporting depression scale. *Archives of General Psychiatry, 12*, 63-70.

Table 1 Descriptive Statistics and Results of T-tests for Mean Differences between Husbands and Wives

Variable	Husbands (n=297)				Wives (n=297)			
	Min	Max	Mean	S.D.	Min	Max	Mean	S.D.
Dependent variable								
Depression	1.32	3.16	1.97	0.32	1.21	3.11	2.06	0.30 ***
Focal independent variables								
Work-to-Family Conflict	1	4	2.21	0.45	1	4	2.10	0.47 **
Psychological family involvement	1	4	3.08	0.56	1	4	3.37	0.48 ***
Behavioral family involvement	1	4	2.30	0.51	2	4	3.15	0.39 ***
Psychological job involvement	1	4	2.81	0.47	1	4	2.37	0.53 ***
Behavioral job involvement								
For husbands (1=work 50+ hours a week)	0	1	0.47	0.50				
For wives (1=work 40+ hours a week)					0	1	0.19	0.39
Control variables								
Age	37	57	44.47	3.47	37	52	42.29	3.16 ***
Education	9	18	14.78	2.12	9	18	13.89	1.61 ***
Number of children	—	—	—	—	1	5	2.03	0.67
Age of youngest child	—	—	—	—	2	9	6.50	1.35
Wives' employment status (1=non-regular work)	—	—	—	—	0	1	0.71	0.45
Weekly days of work	1	7	5.29	0.74	0	7	4.26	1.34 ***
Annual income (mil. Yen)	0	15	7.38	2.82	0	15	2.04	2.45 ***
Job ambiguity	1	4	2.04	0.45	1	3	2.10	0.47
Role conflict at work	1	4	2.37	0.65	1	4	2.16	0.61 ***
Work overload	1	4	2.75	0.63	1	4	2.39	0.59 ***
Job complexity	1	4	2.85	0.56	1	4	2.49	0.63 ***

Note 1: † p<.10; *p<.05; *p<.01; *p<.001

Table 2 OLS Regression Models Predicting Moderating Role of Self Family Involvement on the Relationship between Work-to Family Conflict and Depression

Variable	Husbands				Wives			
	Model 1 Main effects only		Model 2 With interaction terms		Model 3 Main effects only		Model 4 With interaction terms	
Focal independent variables								
Work-to-Family conflict	0.222	***	0.221	***	0.253	***	0.253	***
	(0.042)		(0.047)		(0.041)		(0.041)	
Psychological family involvement (self)	-0.10	**	-0.098	**	-0.096	**	-0.096	**
	(0.033)		(0.032)		(0.033)		(0.033)	
Control variables								
Husbands' age	0.000		0.001		0.005		0.005	
	(0.006)		(0.006)		(0.005)		(0.005)	
Wives' age	-0.001		-0.002		-0.002		-0.002	
	(0.033)		(0.007)		(0.006)		(0.006)	
Husbands' education	0.005		0.004		0.015	†	0.015	†
	(0.011)		(0.010)		(0.009)		(0.009)	
Wives' education	-0.005		-0.004		-0.013		-0.013	
	(0.005)		(0.013)		(0.011)		(0.011)	
Number of children	-0.029		-0.027		0.012		0.012	
	(0.009)		(0.038)		(0.033)		(0.033)	
Age of youngest child	-0.036	†	-0.035	†	0.017		0.017	
	(0.034)		(0.019)		(0.016)		(0.016)	
Wives' employment status (1=non-regular work)	-0.069		-0.070		0.002		0.002	
	(0.016)		(0.046)		(0.042)		(0.042)	
Husbands' weekly days of work	0.008		0.009		0.014		0.014	
	(0.014)		(0.025)		(0.021)		(0.021)	
Wives' weekly days of work	-0.011		-0.011		-0.007		-0.007	
	(0.042)		(0.014)		(0.014)		(0.014)	
Annual income (mil. Yen)	0.000	*	0.000	*	0.000	†	0.000	†
	(0.022)		(0.000)		(0.000)		(0.000)	
Job ambiguity	0.074	†	0.072	†	0.124	***	0.125	***
	(0.000)		(0.043)		(0.038)		(0.038)	
Role conflict at work	0.028		0.028		0.031		0.031	
	(0.039)		(0.033)		(0.029)		(0.029)	
Work overload	-0.093	*	-0.092	**	0.043		0.043	
	(0.029)		(0.033)		(0.030)		(0.030)	
Job complexity	-0.019		-0.021		-0.068	**	-0.068	**
	(0.030)		(0.036)		(0.028)		(0.028)	
Interaction term								
Work-to-Family conflict * family involvement (self)			-0.047				0.018	
			(0.061)				(0.062)	
Adjusted R^2	0.167	***	0.167	***	0.350	***	0.347	***

Note 1: † p<.10; *p<.05; *p<.01; *p<.001

Table 3 OLS Regression Models Predicting Moderating Role of Spousal Family and Job Involvement on the Relationship between Work-to Family Conflict and Depression: Husbands

Variable	Wives' psychological family involvement		Wives' behavioral family involvement		Wives' psychological job involvement		Wives' behavioral job involvement	
	Model 1 Main effects only	Model 2 With interaction terms	Model 3 Main effects only	Model 4 With interaction terms	Model 5 Main effects only	Model 6 With interaction terms	Model 7 Main effects only	Model 8 With interaction terms
Focal independent variables								
Work-to-Family conflict	0.221 ***	0.225 ***	0.225 ***	0.225 ***	0.223 ***	0.228 ***	0.222 ***	0.228 ***
	(0.047)	(0.047)	(0.047)	(0.047)	(0.048)	(0.048)	(0.047)	(0.047)
Psychological family involvement (self)	-0.103 **	-0.101 **	-0.104 **	-0.102 **	-0.092 **	-0.087 **	-0.089 **	-0.085 **
	(0.034)	(0.033)	(0.033)	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)
Wives' psychological family involvement	0.028	0.039						
	(0.039)	(0.040)						
Wives' behavioral family involvement			0.049	0.059				
			(0.048)	(0.048)				
Wives' psychological job involvement					0.031	0.021		
					(0.039)	(0.039)		
Wives' behavioral job involvement (1=work 40+ hours a week)							-0.092 †	-0.099 †
							(0.056)	(0.056)
Control variables								
Husbands' age	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Wives' age	-0.001	-0.001	-0.002	-0.001	-0.001	-0.002	-0.002	-0.002
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Husbands' education	0.005	0.005	0.005	0.004	0.005	0.006	0.005	0.005
	(0.010)	(0.010)	(0.010)	(0.010)	(0.011)	(0.011)	(0.010)	(0.010)
Wives' education	-0.006	-0.006	-0.006	-0.007	-0.004	-0.003	-0.004	0.000
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Number of children	-0.033	-0.034	-0.032	-0.034	-0.017	-0.019	-0.025	-0.016
	(0.038)	(0.038)	(0.037)	(0.037)	(0.039)	(0.039)	(0.037)	(0.038)
Age of youngest child	-0.037 *	-0.037 *	-0.035 †	-0.036 *	-0.033 †	-0.034 †	-0.033 †	-0.031 †
	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)
Wives' employment status (1=non-regular work)	-0.068	-0.064	-0.074	-0.084	-0.047	-0.045	-0.105 *	-0.100 *
	(0.046)	(0.046)	(0.047)	(0.047)	(0.048)	(0.048)	(0.051)	(0.051)
Husbands' weekly days of work	0.008	0.007	0.006	0.004	-0.004	-0.002	0.005	0.008
	(0.025)	(0.025)	(0.025)	(0.025)	(0.026)	(0.026)	(0.025)	(0.025)
Wives' weekly days of work	-0.010	-0.013	-0.010	-0.011	-0.024	-0.023	-0.005	-0.003
	(0.014)	(0.014)	(0.014)	(0.014)	(0.016)	(0.016)	(0.015)	(0.015)
Annual income (mil. Yen)	0.000 *	0.000 *	0.000 *	0.000 *	0.000 **	0.000 **	0.000 *	0.000 *
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Job ambiguity	0.073 †	0.077 †	0.074 †	0.079 †	0.069	0.076	0.073 †	0.074 †
	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)
Role conflict at work	0.028	0.030	0.029	0.032	0.020	0.016	0.026	0.021
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Work overload	-0.094 **	-0.091 **	-0.095 **	-0.097 **	-0.089 **	-0.085 **	-0.092 **	-0.087 **
	(0.033)	(0.033)	(0.033)	(0.032)	(0.033)	(0.033)	(0.032)	(0.032)
Job complexity	-0.021	-0.023	-0.020	-0.012	-0.013	-0.021	-0.021	-0.031
	(0.036)	(0.036)	(0.036)	(0.036)	(0.037)	(0.037)	(0.036)	(0.037)
Interaction terms								
Work-to-Family Conflict*Wives' psychological family involvement		0.131 †						
		(0.072)						
Work-to-Family Conflict*Wives' behavioral family involvement				0.195 *				
				(0.103)				
Work-to-Family Conflict*Wives' psychological job involvement						-0.122 †		
						(0.071)		
Work-to-Family Conflict*Wives' behavioral job involvement								-0.158 †
								(0.098)
Adjusted R^2	0.166 ***	0.173 ***	0.168 ***	0.176 ***	0.168 ***	0.173 ***	0.178 ***	0.178 ***

Note 1: † p<.10; *p<.05; *p<.01; *p<.001

Table 4 OLS Regression Models Predicting Moderating Role of Spousal Family and Job Involvement on the Relationship between Work-to Family Conflict and Depression: Wives

Variable	Husbands' psychological family involvement				Husbands' behavioral family involvement				Husbands' psychological job involvement				Husbands' behavioral job involvement			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	Main effects only		With interaction terms		Main effects only		With interaction terms		Main effects only		With interaction terms		Main effects only		With interaction terms	
Focal independent variables																
Work-to-Family conflict	0.257	***	0.258	***	0.252	***	0.250	***	0.257	***	0.257	***	0.254	***	0.253	***
	(0.041)		(0.041)		(0.041)		(0.042)		(0.041)		(0.041)		(0.041)		(0.042)	
Psychological family involvement (self)	-0.060	†	-0.059	†	-0.096	**	-0.097	**	-0.097	**	-0.097	**	-0.090	**	-0.090	**
	(0.034)		(0.035)		(0.033)		(0.033)		(0.033)		(0.033)		(0.033)		(0.033)	
Husbands' psychological family involvement	-0.084	**	-0.084	**												
	(0.028)		(0.028)													
Husbands' behavioral family involvement					-0.039		-0.040									
					(0.031)		(0.031)									
Husbands' psychological job involvement									0.035		0.035					
									(0.034)		(0.034)					
Husbands' behavioral job involvement (1=work 50+ hours a week)													-0.030		-0.030	
													(0.033)		(0.033)	
Control variables																
Husbands' age	0.005		0.005		0.007		0.006		0.005		0.005		0.006		0.006	
	(0.005)		(0.005)		(0.005)		(0.005)		(0.005)		(0.005)		(0.005)		(0.005)	
Wives' age	-0.002		-0.002		-0.002		-0.002		-0.001		-0.001		-0.002		-0.002	
	(0.006)		(0.006)		(0.006)		(0.006)		(0.006)		(0.006)		(0.006)		(0.006)	
Husbands' education	0.013		0.013		0.016	†	0.015	†	0.014	†	0.014	†	0.015	†	0.015	†
	(0.009)		(0.009)		(0.009)		(0.009)		(0.009)		(0.009)		(0.009)		(0.009)	
Wives' education	-0.014		-0.014		-0.015		-0.014		-0.013		-0.013		-0.014		-0.013	
	(0.011)		(0.011)		(0.011)		(0.011)		(0.011)		(0.011)		(0.011)		(0.011)	
Number of children	0.009		0.009		0.009		0.010		0.012		0.012		0.013		0.014	
	(0.033)		(0.033)		(0.033)		(0.033)		(0.033)		(0.033)		(0.033)		(0.034)	
Age of youngest child	0.014		0.014		0.013		0.013		0.015		0.015		0.017		0.017	
	(0.016)		(0.016)		(0.016)		(0.016)		(0.016)		(0.016)		(0.016)		(0.016)	
Wives' employment status (1=non-regular work)	-0.006		-0.005		-0.009		-0.010		0.000		0.000		0.006		0.005	
	(0.041)		(0.041)		(0.041)		(0.042)		(0.042)		(0.042)		(0.042)		(0.042)	
Husbands' weekly days of work	0.015		0.015		0.018		0.017		0.009		0.009		0.019		0.018	
	(0.021)		(0.021)		(0.022)		(0.022)		(0.022)		(0.022)		(0.022)		(0.022)	
Wives' weekly days of work	-0.008		-0.008		-0.008		-0.008		-0.007		-0.007		-0.006		-0.006	
	(0.013)		(0.014)		(0.014)		(0.014)		(0.014)		(0.014)		(0.014)		(0.014)	
Annual income (mil. Yen)	0.000		0.000		0.000		0.000		0.000	†	0.000	†	0.000		0.000	
	(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
Job ambiguity	0.124	***	0.124	***	0.129	***	0.128	***	0.128	***	0.128	***	0.120	**	0.121	**
	(0.038)		(0.038)		(0.038)		(0.038)		(0.038)		(0.038)		(0.038)		(0.039)	
Role conflict at work	0.038		0.039		0.022		0.022		0.031		0.031		0.035		0.035	
	(0.029)		(0.029)		(0.029)		(0.029)		(0.029)		(0.029)		(0.029)		(0.029)	
Work overload	0.032		0.031		0.043		0.043		0.042		0.042		0.044		0.044	
	(0.030)		(0.030)		(0.030)		(0.030)		(0.030)		(0.030)		(0.030)		(0.030)	
Job complexity	-0.057	*	-0.057	*	-0.073	**	-0.074	**	-0.069	**	-0.069	**	-0.070	**	-0.071	**
	(0.028)		(0.028)		(0.028)		(0.029)		(0.028)		(0.028)		(0.029)		(0.029)	
Interaction terms																
Work-to-Family Conflict*Husbands' psychological family involvement			0.014													
			(0.049)													
Work-to-Family Conflict*Husbands' behavioral family involvement							-0.017									
							(0.065)									
Work-to-Family Conflict*Husbands' psychological job involvement											0.001					
											(0.076)					
Work-to-Family Conflict*Husbands' behavioral job involvement															0.012	
															(0.068)	
Adjusted R^2	0.368	***	0.366	***	0.361	***	0.359	***	0.350	***	0.347	***	0.349	***	0.347	***

Note 1: † p<.10; *p<.05; *p<.01; *p<.001