

INSTITUTE OF POLICY AND PLANNING SCIENCES

Discussion Paper Series

No. 1079

A study on the effect of organizational family  
supportiveness on employees' turnover intention

by  
Yutaka YONETANI, Shinichiro WATANABE,  
and Yuichiro KANAZAWA

February 2004

UNIVERSITY OF TSUKUBA  
Tsukuba, Ibaraki 305-8573  
JAPAN

# A study on the effect of organizational family supportiveness on employees' turnover intention

Yutaka YONETANI, Shinichiro WATANABE, and Yuichiro KANAZAWA\*

February 26, 2004

## Abstract

Women have increasingly participated in the workforce. As a result married men and women now have to juggle their work and family obligations. When they perceive their work roles interfere with their family obligations, they may start looking for other job opportunities so that they can balance their work and family responsibilities. In this paper, we investigate the relationship among organizational family supportiveness, work-family conflict, and turnover intention. We tested the hypotheses by the structural equation model using the data the 112 Japanese men who were full-time white-collar workers with bachelor's degree or higher. We did not find the effect of organizational family supportiveness on turnover intention and on work-family conflict, nor the effect of work-family conflict on turnover intention. We discuss implications of the study and give suggestions for future research.

---

\*Yutaka YONETANI is a student at Graduate School of Systems and Information Engineering, University of Tsukuba, Shinichiro WATANABE is Assistant Professor of Organizational Behavior, and Yuichiro KANAZAWA is Associate Professor of Statistics at the Institute of Policy and Planning Sciences, the University of Tsukuba.

Correspondence concerning this article should be addressed to Yuichiro KANAZAWA, Institute of Policy and Planning Sciences, the University of Tsukuba, 1-1-1 Ten-noh-dai, Tsukuba, Ibaraki 305-8573, Japan. His e-mail address is kanazawa@sk.tsukuba.ac.jp.

# 1 Introduction

Women have increasingly participated in the workforce, and the number of dual earner couples has increased throughout industrial democracies. These led to changes in the gender role structure of male provider–female homemaker. While married women have been increasing their work role, married men have started to play a bigger role in their family. Watanabe, Takahashi, and Minami (1997) reviewed the past studies on work-family gender role norms conducted in Japan, Britain, United States, Israel, and Sweden. They reported that all of these countries confronted these developments, albeit with varying degrees.

In Japan, women’s workforce participation and the number of dual earner couple have increased in recent years: Women made up 40.5% of all employees in 2002, but this rate was 34.6% in 1982, and 38.6% in 1992 (Japan Statistics Bureau, 2002a, 1982, 1992); The proportion of households in which both husband and wife are employed was 33.6% in 2001, but this rate was 22.1% in 1981, and 32.8% in 1991 (Japan Statistics Bureau, 2001, 1981, 1991). According to Japan Prime Minister’s Office (2000, 1987), Japanese also seemed to have been changing their attitudes toward the traditional view that men belong primarily to the work place and women primarily to home: The percentage of people who “agree” with the view dropped to 25.0% in 2000 from 43.1% in 1987; Also those who “disagree” with the view rose to 48.3% in 2000, from 26.9% in 1987. Institute of Population Problems (1993) and National Institute of Population and Social Security Research (1998) reported that married women responded that their husbands participated in household chores and child rearing at least once a week, and the upward tendency was

seen. In the reports, increasing percentages of married women indicated their husbands bring the trash out (26.5% in 1993 and 34.9% in 1998), do grocery shopping (25.2% and 34.9%), do laundry (15.7% and 19.7%), cook (20.1% and 24.9%), play with their children (78.0% and 82.3%), give their children a bath (72.7% and 77.4%), help their children eat (40.9% and 49.9%), and change their infants' and toddlers' diapers (37.5% and 46.1%).

As a result married men and women now have to juggle their work and family obligations. Accordingly, more and more of them wish to have work environments in which they can fulfill not only their work roles but also meet their family obligations. When they perceive their work roles interfere with their family obligations (work-family conflict), they may start looking for other job opportunities so that they can balance their work and family responsibilities. The resulting loss of productivity and their eventual turnover may waste the investments made for their job training and professional development. In other words, providing family supportive policies could be an effective organizational strategy to make work environment more attractive for employees, thereby reducing employees' turnovers.

In the past literature, researchers examined the effect of organizational family supportiveness on turnover intention (Allen, 2001; Honda-Howard and Homma, 2001; Kirchmeyer and Cohen, 1999; Thompson, Beauvais, and Lyness, 1999; Aryee, Luk, and Stone, 1998; Cohen, 1997; Rothausen, 1994), the effect of organizational family supportiveness on work-family conflict (Berson, 2002; Nielson, Carlson, Lankau, 2001; Kirchmeyer et al., 1999; Thompson et al., 1999; Frone, Yardley, and Markel, 1997; Parasuraman, Purohit, and Godshalk, 1996; Judge, Boudreau, and Bretz, 1994), and the

effect of work-family conflict on turnover intention (Greenhaus, Parasuraman, and Collins, 2001; Grandey and Cropanzano, 1999; Kirchmeyer et al., 1999; Cohen, 1997; Netermeyer, Boles, and McMurrian, 1996) separately. But few studies examined these relationships simultaneously. In this paper, we will investigate the relationship among organizational family supportiveness, work-family conflict, and turnover intention: More specifically we wish to know if organizational family supportiveness reduces turnover intention; If so, we further wish to know if organizational family supportiveness affects turnover intention indirectly through work-family conflict; If not, we need to examine closely the possible reasons why the hypothesis which enjoyed a broad support in the previous studies in the West did not hold for the Japanese data.

## 2 Literature Review and Hypotheses

Kirchmeyer et al. (1999) was one of the few literature that examined the causal chains from organizational family supportiveness to work-family conflict to turnover intention simultaneously. Their study covered nonwork domain including family, friends, hobbies and recreation, and community and political associations. They found that worksite support affected turnover intention indirectly through interference from work to nonwork and stress symptoms in order. Since they did not hypothesize the direct effect of worksite support on turnover intention, we did not know if work-family conflict mediated the relationship between organizational family supportiveness and turnover intention in their study.

## Model 1

We first hypothesize Model 1 as shown in Figure 1 in order to establish that there exists an effect that may be mediated. It is widely believed that organizational family supportiveness is one of the reasons why employees stay with their organizations. In the past literature, different variables are used to measure organizational family supportiveness. To summarize they include overall work-family benefits provided (Thompson et al., 1999), perception of overall organizational family supportiveness (Allen, 2001; Thompson et al., 1999), perception of overall organizational nonwork supportiveness (Kirchmeyer et al., 1999; Cohen, 1997), supervisor's family supportiveness (Allen, 2001; Thompson et al., 1999; Aryee et al., 1998), possibility of using work-family benefits without negative career consequence (Thompson et al., 1999), work schedule flexibility (Aryee et al., 1998; Rothausen, 1994), and satisfaction with health and welfare benefits (Honda-Howard et al., 2001). These results have consistently indicated that organizational family supportiveness reduced turnover intention. Therefore, we formulate the following hypothesis regarding the causal path from family supportiveness to turnover intention:

**H1:** Organizational family supportiveness affects turnover intention negatively.

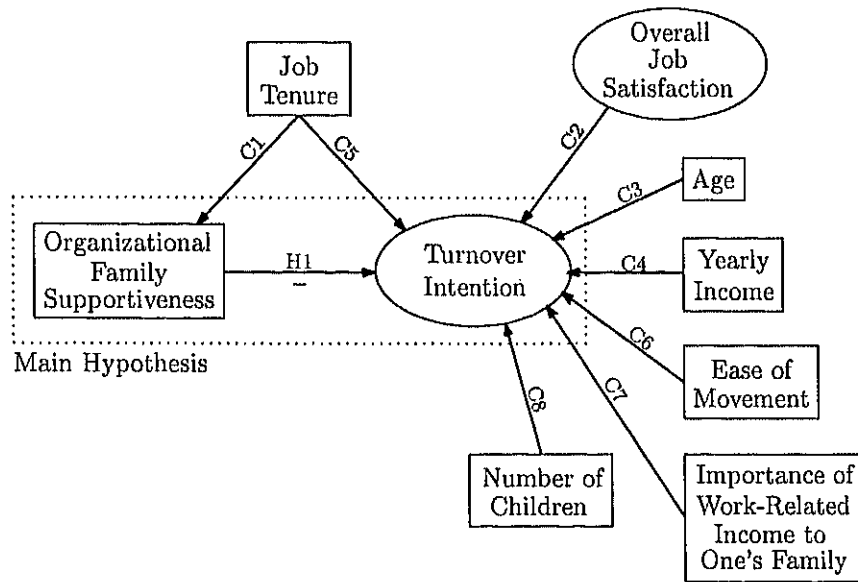


Figure 1: Path diagram of Model 1. The manifest variable is in box and the latent variable is in oval. The sign “-” indicates that the effect is negative. We also hypothesize several effects of control variables on organizational family supportiveness and turnover intention respectively as shown in this figure. Which control variables affect in what way will be explained in section 3.

## Model 2

We next propose Model 2 as shown in Figure 2, which includes work-family conflict as a mediator that transmits the effect of organizational family supportiveness on turnover intention.

Organizational family supportiveness enables employees to balance their work roles with their family obligations by providing them with more op-

portunities to participate in family activities. In other words, organizational family supportiveness in general would decrease work-family conflict. In the past literature, many variables are used to measure various aspects of organizational family supportiveness. They are overall work-family benefits provided (Thompson et al., 1999; Judge et al., 1994), perception of overall organizational family supportiveness (Berson, 2002; Thompson et al., 1999), perception of overall organizational nonwork supportiveness (Kirchmeyer et al., 1999), supervisor's family supportiveness (Frone et al., 1997), co-worker's family supportiveness (Frone et al., 1997), mentor's family supportiveness (Nielsen et al., 2001), work schedule flexibility (Parasuraman et al., 1996), organizational time demands (Thompson et al., 1999). These results have consistently indicated that organizational supportiveness reduced work-family conflict. Therefore, we formulate the following hypothesis regarding the causal path from family supportiveness to work-family conflict:

**H2:** Organizational family supportiveness attenuates work-family conflict.

Past studies strongly indicate work-family conflict increase turnover intention. For example, see Greenhaus et al. (2001), Kirchmeyer et al. (1999), Grandey et al. (1999), Cohen (1997), and Netemeyer et al. (1996). Thus, we formulate the following hypothesis regarding the causal path from work-family conflict to turnover intention:

**H3:** Work-family conflict enhances turnover intention.

Combining H2 and H3, we can show the indirect effect of organizational family supportiveness on turnover intention through work-family conflict.



Notice that, if organizational family supportiveness reduces turnover intention, we wish to know the effect is mediated by work-family conflict. Thus, we have:

**H1'**: Work-family conflict mediates the effect of organizational family supportiveness on turnover intention.

If the path coefficient of H1' is reduced in absolute size compared with the one obtained in H1, but is still different from zero statistically, then work-family conflict will be considered as a "partial mediator." On the other hand, if the path coefficient of H1' is zero statistically, then work-family conflict will be considered as a "complete mediator." If, on the other hand, organizational family supportiveness does not influence turnover intention in our data, we at least need to identify which factors do affect turnover intention.

In this section, we reviewed the past literature and formulated four hypotheses. The next section will be largely devoted to methodological issues to test for the hypotheses.

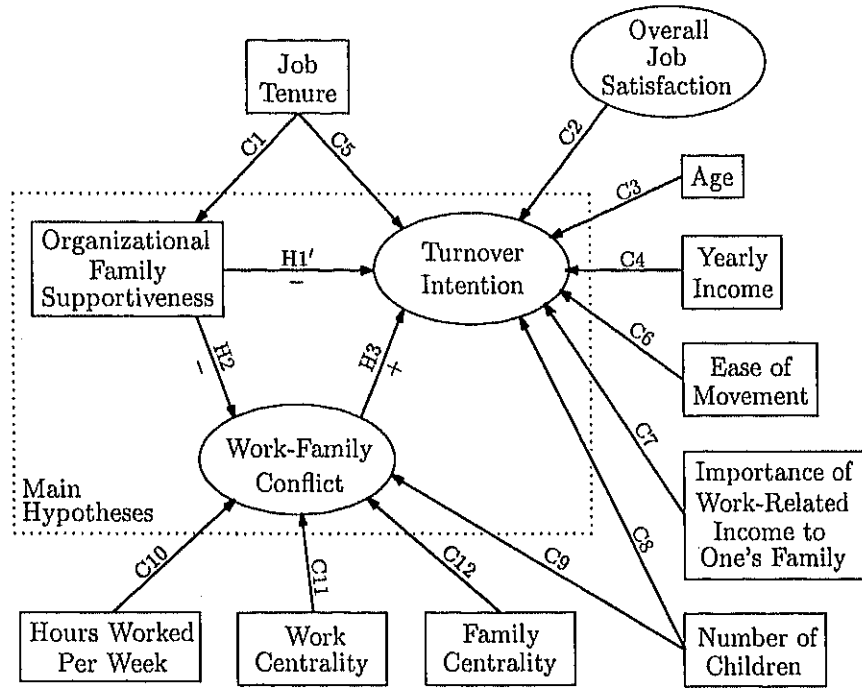


Figure 2: Path diagram of Model 2. The manifest variable is in box and the latent variables are in ovals. The sign “+” indicates positive effects and the sign “-” indicates negative effects. We also hypothesize several effects of control variables on organizational family supportiveness, turnover intention, and work-family conflict, respectively as shown in this figure. Which control variables affect in what way will be explained in section 3.

### 3 Method

#### Sample

The participants in this study were graduates of a major research university in Japan, who lived in 23 wards, Tokyo as of . We collected sample as stated below. First, we mailed returnable postal cards with postage-prepaid and pre-printed return address on them to respondents with the use of the lists of graduates in 1960 through 1994. On them, we asked respondents to return the cards if they would be willing to participate in our study. Five hundred and thirty nine were returned (26.95% response rate). After that, we sent questionnaires to all these 539 respondents, and 466 were returned.

We only used responses by full-time and white-collar workers with bachelor's degree or higher. They work in civil engineering, real estate, finance, insurance, trading, wholesale, retail, information processing, manufacturing, logistics, medical services, advertising, broadcasting, publishing, services, government, and education. Note that for those in education we only include superintendents or assistant superintendents who manage schools. We did not include teachers because their employment systems are quite different from other white-collar workers: For example, their work schedules are organized around the official 35-week academic year and quite removed from industry standard 48-week schedule.

We treated missing values as follows. If an individual left one or more item(s) unanswered, we imputed an average of his/her answers to the remaining questions there. However, if the number of unanswered items exceeded the 20% threshold of items measuring the same latent variable, we deleted

the case. For instance, if the five items measure a latent variable, then individuals with two or more items unanswered are deleted from the data set. After the imputation and deletion, sample size of women was 23 while that of men was 119. So women were excluded from our study.

We additionally deleted some cases to make the analysis statistically rigorous. In our analysis, we use ordinal as well as continuous variables. As a result we are forced to use a polyserial correlation, which is a correlation between an ordinal and a continuous variables. When we calculate a polyserial correlation, we need the mean and the variance of a continuous variable for each category of an ordinal variable. When there is only a single case in one category of the ordinal variable, or when the values of a continuous variable corresponding to one category of an ordinal variable are all equal, the variance of a continuous variable in the category cannot be computed. When this happened, we deleted the cases in such categories.

We eventually used 112 respondents for the examination of our hypotheses. Of the 112 respondents, their yearly income distributed from 3.4 million yen to 20 million yen, the average yearly income was 9.40 million yen, the median yearly income was 10 million yen, and standard deviation was 3.03 million yen. According to Japan Statistics Bureau (2002b), the average yearly income of whole Japanese worker's households were 6.61 million yen, and the average yearly income of our respondents, 9.40 million yen, is between the average yearly income of 8.46 million yen within 70–80% bracket, and that of 10.03 million yen within 80–90% bracket of whole Japanese worker's households. So they were undoubtedly well-off as a group. Additionally, of our 112 respondents, their age distributed from 30 to 63, the average age was 46.08,

and standard deviation was 9.37; their job tenure distributed from 2 months to 38 years and 9 months, the average job tenure was 17 years 3.49 months, and standard deviation was 9 years and 8.74 months; their hours worked per week distributed from 25 hours to 120 hours, the average hours worked per week was 50.05 hours, and standard deviation was 11.64 hours; the number of junior high school aged or younger children distributed from 0 to 3, its average was 0.83, and standard deviation was 0.96; Sixty seven people have bachelor's degree, forty four people have master's degree, and one person has doctorate. These sample summary statistics generally point to the well-to-do and more fortunate group of people than the Japanese general population.

## Variables

In this section, we will explain all variables previously introduced in Figure 1 and 2. The variables for the main hypotheses are as follows.

**Organizational family supportiveness.** To measure organizational family supportiveness, we asked respondents the following three questions: (1) "Suppose that an average male employee needs a parental leave. What do you think is the length of a parental leave (in days) he can take freely without delegating substantial part of his responsibility to his colleagues and without any concern for being relocated?"; (2) Same question, but an average female employee needs a parental leave; and (3) "Suppose that one of your family members needs to be hospitalized. How many days-off do you think your employer lets you take to look after him/her?" These answers were given in days, and sum of which, we presume, measures an aspect of organizational

family supportiveness.

**Turnover intention.** Turnover intention was measured with four-item scales used in previous research (Hendrix, Nestor, and Troxler, 1985; and Watanabe, 1994). Each of the items included five response alternatives ranging from 1 (*strongly disagree*) to 3 (*neither*) to 5 (*strongly agree*). Examples are, "I intend to leave my organization within the next 12 months," and "I am actively seeking another employment opportunity." See Appendix A for the remaining measurement items. The Cronbach's coefficient alpha was 0.84.

**Work-family conflict.** Work-family conflict was measured with five-item scales developed by Netemeyer et al. (1996). Each of the items included five response alternatives ranging from 1 (*strongly disagree*) to 3 (*neither*) to 5 (*strongly agree*). Examples are "The demands of my work interfere with my home and family life," and "The amount of time my job takes up makes it difficult to fulfill family responsibilities." See Appendix A for the other measurement items. The Cronbach's coefficient alpha was 0.92.

When examining each hypothesis in section 2, we control the effects of several variables on organizational family supportiveness, turnover intention, work-family conflict. We next explain the control variables.

Since it is the case that the longer an employee has worked for an organization, the longer paid leaves he/she is customarily entitled to, organizational family supportiveness as measured in paid leaves must be controlled by job tenure (C1 in Figure 1 and 2).

**Job tenure.** We asked the respondents their job tenure in years and months. After that we transform them together into months.

Second, following Mobley (1982), we control the effects of several variables on turnover intention. They are overall job satisfaction (C2 in Figure 1 and 2), age (C3), yearly income (C4), job tenure (C5), ease of movement (C6), and family responsibility. In addition, in Mobley (1982), the number of children (C8 in Figure 1 and 2) had been suggested as the variable representing responsibility to one's family. We also use importance of work-related income to one's family (C7 in Figure 1 and 2) as the variable measuring how the respondents' felt family responsibility.

**Overall job satisfaction.** Overall job satisfaction was measured with four-item scales developed by Quinn and Staines (1979). One of four items, "How are you satisfied with your present work?", was arranged on four-point scales: *completely dissatisfied* (1), *not too satisfied* (2), *tolerably satisfied* (3), *very satisfied* (4). We grouped (1) and (2) together. The other three items, such as "If you can choose your present work or other kinds of work, which do you choose?" were arranged on three point scales. See Appendix A for the remaining measurement items. The Cronbach's coefficient alpha was 0.77.

**Ease of movement.** Ease of movement was operationalized by asking the subjects to give their best estimate of their alternative employment opportunities for the next 12 months. The response alternatives for the question were arranged on five-point scales ranging from 1 (*very difficult*) to 5 (*very easy*).

**Number of children.** We asked the respondents how many of their children were in kindergartens or younger, in grade school, and in junior high school. The sum of these numbers was used to indicate the number of children.

**Importance of work-related income to one's family.** This was operationalized by asking subjects the following question: "How important is your current job in terms of your ability to support your family?" The response alternatives for the question were arranged on five-point scales ranging from 1 (*very unimportant*) to 5 (*very important*).

Third, the control variables for work-family conflict were number of children (C9 in Figure 2), hours worked per week (C10), work centrality (C11), and family centrality (C12) based on the previous studies. In the past literature, the variables which significantly affected work-family conflict were hours worked per week (Nielsen et al., 2001; Thompson et al., 1999; Frone et al., 1997; Parasuraman et al., 1996; Judge et al., 1994), the number of children (Thompson et al., 1999; Parasuraman et al., 1996; Judge et al., 1994). Family involvement also affects work-family conflict while job involvement does not (Parasuraman et al., 1996). Parasuraman et al.'s (1996) items for job involvement and family involvement expressed the psychological importance of work or family in the person's life, and they transformed the word from work to job when they were used. Therefore we control the effects of work centrality and family centrality on work-family conflict.



**Hours worked per week.** We asked the respondents their average hours worked per week.

**Work centrality.** Work centrality was operationalized by asking subjects the following question: “How important is your work life in your life?” The response alternatives for the question were arranged on seven-point scales ranging from 1 (*most unimportant*) to 7 (*most important*).

**Family centrality.** Family centrality was operationalized by asking subjects the following question: “How important is your domestic life in your life?” The response alternatives for the question were arranged on seven-point scales ranging from 1 (*most unimportant*) to 7 (*most important*).

## Statistical Method

**Pre-analytical procedure.** We examined our hypotheses by using the structural equation model with latent variables in the LISREL 8.53 (Jöreskog & Sörbon, 2002). Since our data were measured in either ordinal or interval scale, we have to perform the following pre-analytical procedure.

First, for each ordinal variable, we suppose that there was an underlying continuous random variable that was normally distributed with mean zero and unit variance. Continuous variables are transformed so that they are approximately normally distributed with mean zero and unit variance.

Then, we calculate a correlation between any two variables. In this study, we have three kinds of correlation—a polychoric, a polyserial, and a Pearson correlations. When both variables are ordinal, a correlation is a polychoric

correlation assuming an underlying bivariate normal distribution. When one variable is ordinal and the other is continuous, a correlation is a polyserial correlation where an underlying bivariate normal distribution is assumed again. And a Pearson correlation is calculated from continuous variables. Now, we call the matrix which consist of these correlations a *polychoric-polyserial correlation matrix*. We calculated a polychoric-polyserial correlation matrix and its asymptotic covariance matrix by PRELIS 2.53 (Jöreskog & Sörbon, 2002). When we examined our hypotheses with the structural equation model, we used the polychoric polyserial correlation matrix and its asymptotic covariance matrix instead of covariance matrix of ordinal and continuous variables.

When the polychoric-polyserial correlation was not positive definite, we have two ways to make it positive definite. One way was deleting some measurement items. The other was using the ridge option with a ridge constant  $c$  in LISREL 8.53 (Jöreskog and Söbon, 2002). If we use ridge option, the products of the ridge constant  $c$  and each diagonal element of polychoric-polyserial correlation is added to each corresponding component of the original polychoric-polyserial correlation. Since we have a limited number of measurement items, we used the ridge option with a ridge constant of 0.1.

#### **Analysis of measurement model and structural equation model.**

When we analyze the data set with mixture of ordinal and continuous variables, it is suggested that we use the method of (generally) weighted least square (WLS) with the inverted asymptotic covariance matrix of the polychoric-polyserial correlation matrix as weights. Since our sample size was not large enough, however, the asymptotic covariance matrices was not accurate and

not invertible. When this happens, we estimate model parameters by means of maximum likelihood estimation instead, and used asymptotic covariance matrices to compute asymptotically corrected Satorra-Bentler scaled chi-square statistics and standard errors of estimators.

In the measurement model and structural equation model, we first assumed that all covariances between the measurement errors are zero. We then modified the model by relaxing the restrictions of no correlations on the measurement errors according to the modification indices in LISREL 8.53 (Jöreskog and Söbom, 2002) for the following reason: If the correlations among the measurement items are induced by a set of latent variables, then when all these latent variables are accounted for, the measurement errors will be uncorrelated. Since we assume one latent variable for a set of measurement items, it is expected that the measurement errors are likely to be correlated.

## 4 Result

### Test of Model 1

We report the estimates of factor loadings ( $\hat{\lambda}$ ),  $t$ -values, and  $R^2$  for each measurement item for the measurement model in Table 1. As shown in Table 1, all measurement items were significant ( $p < 0.01$ ). We judged that the two latent variables—turnover intention and overall job satisfaction—were well measured with our hypothesized items.

Having checked the result of the measurement model, we then examined the structural equation model. We report the estimates of the path

Table 1: Estimates of factor loadings ( $\hat{\lambda}$ ),  $t$ -values, and  $R^2$  for the measurement model in the test of Model 1

Latent Variables	Item	$\hat{\lambda}$	( $t$ -value)	$R^2$	Latent Variables	Item	$\hat{\lambda}$	( $t$ -value)	$R^2$
Overall Job Satisfaction	OJS-1	0.83	(9.95)**	0.63	Turnover Intention	TOI-1	0.72		0.47
	OJS-2	0.56	(5.05)**	0.29		TOI-2	0.48	(4.32)**	0.21
	OJS-3	0.71	(8.41)**	0.46		TOI-3	0.89	(6.96)**	0.72
	OJS-4	0.61	(6.45)**	0.34		TOI-4	0.96	(6.58)**	0.83

Note. \* $p < .05$ , \*\* $p < .01$ .

$\hat{\lambda}$  of TOI-1 was fixed because turnover intention was dependent latent variable.

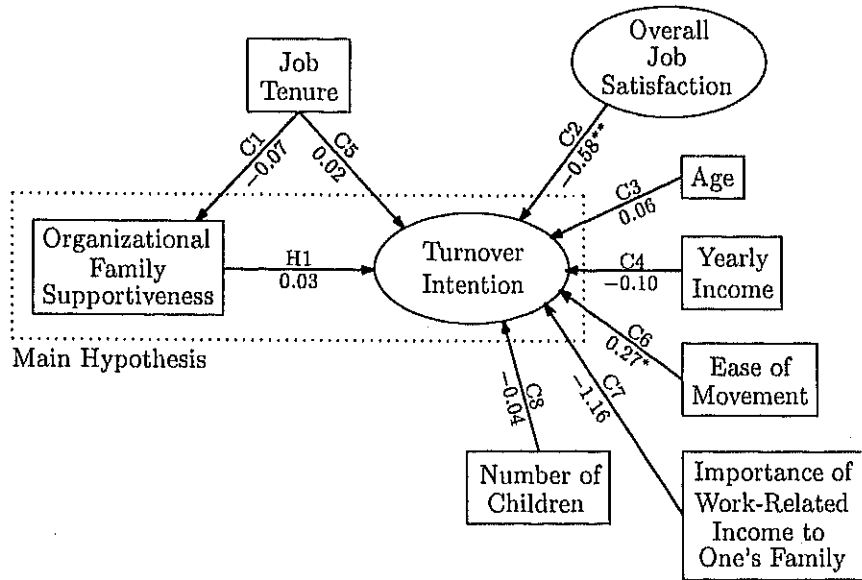
coefficients and the overall goodness-of-fit indices in Figure 3. As shown in the figure, the path coefficient from organizational family supportiveness to turnover intention (H1) was not significant ( $t$ -value = 0.57;  $p > 0.55$ ).

In terms of the effects of control variables on turnover intention, significant path coefficients were found for overall job satisfaction (C2 in Figure 3) ( $\beta = -0.58$ ;  $t = -4.02$ ;  $p < 0.01$ ), and ease of movement to turnover intention (C6) ( $\beta = 0.27$ ;  $t = 2.56$ ;  $p < 0.05$ ). The other control variables for turnover intention—age (C3 in Figure 3), yearly income (C4), job tenure (C5), importance of work-related income to one's family (C7), and number of children (C8)—were not significant ( $t$ -values = 0.55,  $-1.27$ , 0.19,  $-1.16$ , and  $-0.55$ , respectively;  $p > 0.20$  for all). And job tenure (C1 in Figure 3) did not have a significant effect on organizational family supportiveness ( $t$ -value =  $-1.02$ ;  $p > 0.30$ ).

We also report several overall goodness-of-fit indices for Model 1, that is Satorra-Bentler  $\chi^2$  statistics, root mean square error of approximation (RMSEA), normed fit index (NFI), incremental fit index (IFI), relative fit index (RFI), non-normed fit index (NNFI) in Figure 3. Browne & Cudeck (1993)

suggest that a value of 0.05 of RMSEA indicates a close fit and that values up to 0.08 represent reasonable errors of approximation in the population. Although, in terms of NFI, IFI, RFI, and NNFI, there is no criterion that indicates good fit, Bentler and Bonett (1980) suggest that for NFI and NNFI: "In our experience models with overall fit indices of less than 0.9 can usually be improved substantially." And, while NFI and RFI may provide an overly pessimistic assessment of model fit in small sample, IFI and NNFI are less subject to this problem.

Of these overall goodness-of-fit indices in Figure 3, NNFI narrowly indicated good fit (NNFI = 0.90) and RMSEA indicated that Model 1 held approximately with the reasonable error in the population (RMSEA = 0.07). But Satorra-Bentler  $\chi^2$  and NFI did not support Model 1 (Satorra-Bentler  $\chi^2(67) = 102.06$  with  $p = 0.00$ , NFI = 0.84). And we decided that IFI indicated good fit (IFI = 0.94) while RFI did not (RFI = 0.75). Since our sample size was small, we found the negative assessments of NFI and RFI compared to IFI and NNFI. Nevertheless, we judged that Model 1 was not supported by the data according to Satorra-Bentler  $\chi^2$ .




---

Overall Goodness-of-fit Statistics

Satorra-Bentler  $\chi^2(67) = 102.06$  ( $p = 0.00$ )

Root Mean Square Error of Approximation (RMSEA) = 0.07

Normal Fit Index (NFI) = 0.84

Incremental Fit Index (IFI) = 0.94

Relative Fit Index (RFI) = 0.75

Non-Normed Fit Index (NNFI) = 0.90

---

*Note.* \* $p < .05$ , \*\* $p < .01$ .

Figure 3: Estimates of the path coefficients and the overall goodness-of-fit indices in the test of Model 1

### Test of Model 2

In the test of Model 1, since we could not find the direct effect of organizational family supportiveness on turnover intention, we can no longer

examine the mediation effect of work-family conflict between organizational family supportiveness and turnover intention (H1'). But it is possible for the effect of organizational family supportiveness on work-family conflict (H2) and that of work-family conflict on turnover intention (H3) to exist. Thus, we next tested Model 2 as shown in Figure 2. We report the estimates of factor loadings ( $\hat{\lambda}$ ),  $t$ -value,  $R^2$  for the measurement models in Table 2. As shown in the table, all measurement items were significant at the  $p < 0.01$  level. We judged the three latent variables—work-family conflict, overall job satisfaction, and turnover intention—were well measured.

Table 2: Estimates of factor loadings ( $\hat{\lambda}$ ),  $t$ -values, and  $R^2$  for the measurement model in the test of Model 2

Latent Variables	Item	$\hat{\lambda}$	( $t$ -value)	$R^2$	Latent Variables	Item	$\hat{\lambda}$	( $t$ -value)	$R^2$
Work-Family Conflict	WFC-1	0.71		0.46	Overall Job Satisfaction	OJS-1	0.83	(9.46)**	0.63
	WFC-2	0.88	(11.81)**	0.70		OJS-2	0.57	(5.24)**	0.30
	WFC-3	0.91	(11.00)**	0.75		OJS-3	0.71	(8.31)**	0.46
	WFC-4	1.00	(9.25)**	0.91		OJS-4	0.60	(6.39)**	0.33
	WFC-5	0.59	(5.53)**	0.32	Turnover Intention	TOI-1	0.71		0.46
				TOI-2		0.48	(4.29)**	0.21	
				TOI-3		0.89	(6.87)**	0.73	
				TOI-4		0.95	(6.52)**	0.82	

Note. \* $p < .05$ , \*\* $p < .01$ .

$\hat{\lambda}$  of WFC-1 and TOI-1 were fixed because work-family conflict and turnover intention were dependent latent variables.

Then, we report the estimates of the path coefficients and the overall goodness-of-fit indices in Figure 4. As shown in the figure, the path coefficient from organizational family supportiveness to work-family conflict (H2) and the path coefficient from work-family conflict to turnover intention (H3) were not significant ( $t$ -value = 0.06 and 0.54, respectively;  $p > 0.55$  for all).

The path coefficient from organizational family supportiveness to turnover intention was still not significant ( $t$ -value = 0.43;  $p > 0.65$ ).

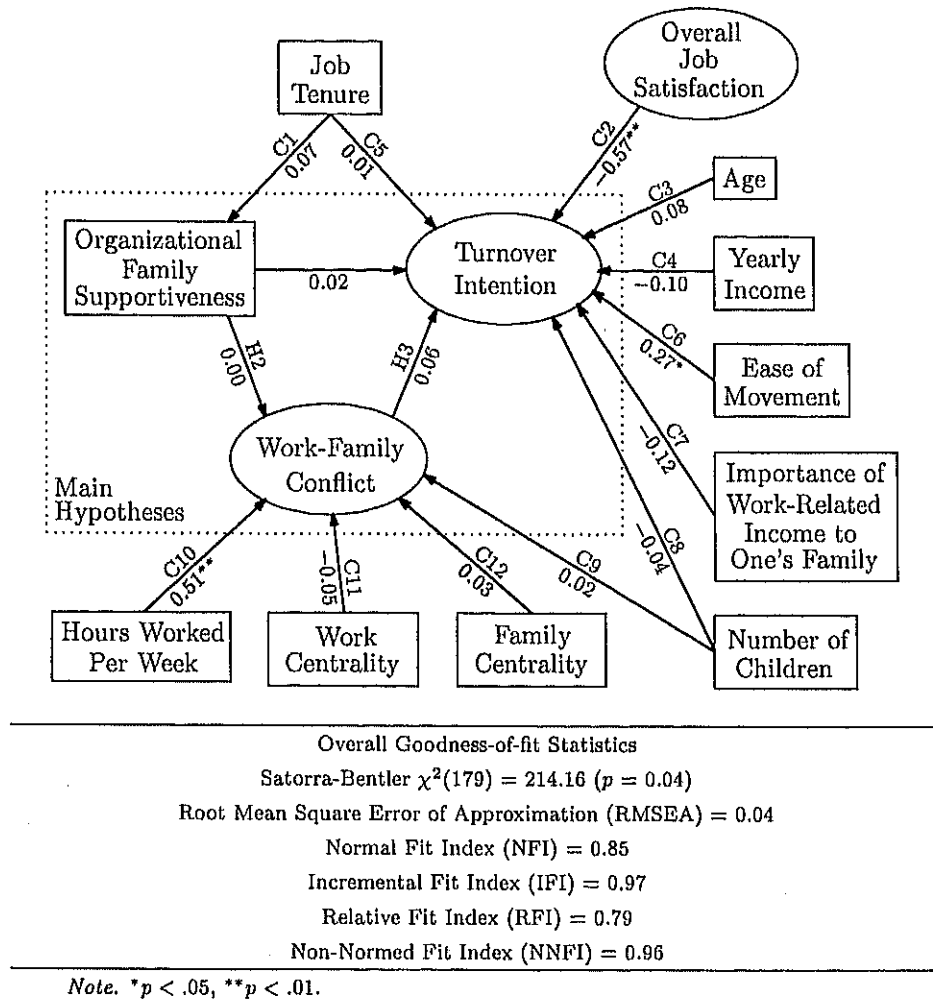


Figure 4: Estimates of the path coefficients and the overall goodness-of-fit indices in the test of Model 2



In terms of the path coefficients of control variables, significant path coefficients from hours worked per week to work-family conflict (C10 in Figure 4) was 0.51 ( $t$ -value = 3.58;  $p < 0.01$ ), that from overall job satisfaction to turnover intention (C2) was  $-0.57$  ( $t$ -value =  $-3.92$ ;  $p < 0.01$ ), and that from ease of movement to turnover intention (C6) was 0.27 ( $t$ -value = 2.57;  $p < 0.05$ ). Other control variables for turnover intention—age (C3 in Figure 4), yearly income (C4), job tenure (C5), importance of work-related income to one's family (C7), and number of children (C8)—were not significant ( $t$ -value = 0.66,  $-1.25$ , 0.19,  $-1.16$ , and  $-0.46$ , respectively;  $p > 0.10$  for all). Moreover, the path coefficient from job tenure to organizational family supportiveness (C1 in Figure 4), that from number of children to work-family conflict (C9), that from work centrality to work-family conflict (C11), and that from family centrality to work-family conflict (C12) were not significant ( $t$ -value =  $-1.02$ , 0.35,  $-0.36$ , and 0.34, respectively;  $p > 0.30$  for all).

We also report several overall goodness-of-fit indices of Model 2 in the Figure 4. Of these overall goodness-of-fit indices in Figure 4, NNFI indicated good fit (NNFI = 0.96) and RMSEA indicated that Model 2 was close fit in the population (RMSEA = 0.04). But Satorra-Bentler  $\chi^2$  and NFI did not support Model 1 (Satorra-Bentler  $\chi^2(179) = 214.16$  with  $p = 0.04$ , NFI = 0.85). And we decided that IFI indicated good fit (IFI = 0.97) while RFI did not (RFI = 0.79). Since our sample size was small, we found the negative assessments of NFI and RFI compared to IFI and NNFI. Nevertheless, we judged that Model 2 was not supported by the data according to Satorra-Bentler  $\chi^2$ .

## 5 Discussion

In this study, we examined the relationship among organizational family supportiveness, work-family conflict, and turnover intention. All of our hypotheses were not supported by the data. In other words, our results indicated that not only mediational effect of work-family conflict was not found, but also the relationship between organizational family supportiveness and turnover intention was not found. We may provide two accounts for this. One concerns the items measuring organizational family supportiveness, and the other concerns the sample itself or more specifically the population it represents in terms of yearly income, gender, and cultural background in Japan.

According to Allen (2001), the relationship between organizational family supportive benefits and turnover intention was mediated by respondents' perception of organizational family supportiveness. Although our items for organizational family supportiveness measured respondents' perceptions affected by organizational family supportiveness, but not supportiveness itself. While past researchers' organizational family supportiveness scales incorporate, in their measurement windows, more daily affairs and wider environments of work places, our items are limited to parental leaves and emergency leaves. If we had been able to use items which have various facets of organizational family supportiveness, such as supervisor's or coworker's family supportiveness, or family supportive environments of work places, we might have been able to find more concrete relationships between organizational family supportiveness and work-family conflict, and between organizational family supportiveness and turnover intention. Our model is needed to test

with more multi-faceted data which expresses wider organizational family supportiveness.

Secondly, we need to mention about the nature of our sample. Although all respondents of our study had bachelor's degree or higher, and their average age was 46.08, the average yearly income of 9.40 million yen for them was much higher than that of average yearly household income of 5.87 million yen for all households in Japan. It appears that the men in our sample are so motivated and reciprocated monetarily that their family problems did not affect their turnover intentions.

Additionally, as stated in the previous sections 1 and 2, past researchers separately examined the relationship between organizational family supportiveness and turnover intention, between organizational family supportiveness and work-family conflict, and between work-family conflict and turnover intention separately. These studies all used samples other than Japanese except for Honda-Howard et al. (2001). Honda-Howard et al. (2001) found that the relationship between organizational family supportiveness and turnover intention was statistically significant for Japanese women, while our sample included only Japanese men. According to Watanabe et al. (1997), Japan has more traditional gender role structure in the relationship between work and family roles than Britain, United States, Israel, and Sweden. Moreover, many parts of family roles are still carried out by their wives: about seventy-seven percent of full-time working women fulfill more than 80% of their household chores (Institute of Population and Social Security Research, 1998). Thus gender and cultural differences of sample may make the results of our study different from those of the past studies which examined similar

hypotheses. That is, we can say that Japanese married men still act according to the view of traditional gender role structure. And it is reasonable to assume that, Japanese married men generally separate their work place from family and tend to work for their present organization without reference to whether organization is family supportiveness or whether they feel work-family conflict. In other words, even if Japanese married men do not perceive their organizations to be family supportiveness, this will not activate their intention in leaving their organizations. Also they feel work-family conflict caused by work hours as indicated in our result of examination, but their conflicts do not lead them to turnover intention. Our results also indicated that turnover intention of Japanese men is affected by overall job satisfaction and ease of movement rather than family problems.

Before we discuss whether organizations should provide family supportive policies, we need to reexamine our model for Japanese married women. In the past literature, gender was used as a moderator for the relationships between organizational family supportiveness and turnover intention (Aryee et al., 1998), and between organizational family supportiveness and work-family conflict (Nielson et al., 2001), respectively. In each relationship, the moderating effect of gender did not reach the statistical significance. Greenhaus et al. (1997) examined the moderation effect of gender for the relationship between work-family conflict and turnover intention. But Greenhaus et al.'s (1997) work-family conflict is a composite scale of both work-family conflict (work interferes with family) and family-work conflict (family interferes with work) and the difference of those two versions of conflict were largely ignored. Additionally, these studies were conducted in Hong-Kong (Aryee et

al., 1998) and the U.S. (Nielson et al., 2001; Greenhaus et al., 1997), and this line of research does not exist in Japan. That is, the sample drawn from Japanese working men and women may reveal different findings from those obtained in other countries. Based on the suggestion of Watanabe et al. (1997) and several statistics we noted before, it is reasonable to predict that Japanese married women are likely to look for employers who enable them to easily juggle their work and family roles, while Japanese married men are likely to prioritize work over family even when they faced with work-family conflict. Alternatively, Japanese married women wish to have work environments which are family supportive and where they did not feel much work-family conflict than Japanese married men do. So it is interesting to investigate gender and cultural differences, and the investigation will make a unique contribution to the literature.

## References

- [1] Allen, T. D. (2001). Family-supportive work environments: the role of organizational perceptions. *Journal of Vocational Behavior*, 58, 414-435.
- [2] Aryee, S. (1998). Family-responsive variables and retention-relevant outcomes among employed parents. *Human Relations*, 51(1), 73-87.
- [3] Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.

- [4] Behson, S. J. (2002). Which dominates? The relative importance of work-family organizational support and general organizational context on employee outcomes. *Journal of Vocational Behavior*, 61, 53-72.
- [5] Bentler, P. M. & D. G. Bonett (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-600.
- [6] Bollen, K. A. (1989). *Structural equations with latent variables*. New York: John Wiley & Sons.
- [7] Browne, M. W. & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Editors): *Testing Structural Equation Models*, Sage Publications.
- [8] Cohen, A. (1997). Nonwork influences on withdrawal cognitions: an empirical examination of an overlooked issue. *Human Relations*, 50(12), 1511-1536.
- [9] Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50, 145-167.
- [10] Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behavior*, 54, 350-370.
- [11] Greenhaus, J. H., Collins, K. M., Singh, R., & Parasuraman, S. (1997). Work and family influences on departure from public accounting. *Journal of Vocational Behavior*, 50, 249-270.

- [12] Hendrix, W. H., Nestor, K. O., & Troxler, R. G. (1985). Behavioral and psychological consequences of stress and its antecedent factors. *Journal of Applied Psychology*, 70(1), 188-201.
- [13] Honda-Howard, M. & Homma, M. (2001). Job satisfaction of Japanese career women and its influence on turnover intention. *Asian Journal of Social Psychology*, 4, 23-38.
- [14] Institute of Population Problems (1993). *The first national survey on family in Japan, 1993* (Investigative and Report). Tokyo: Institute of Population Problems, Ministry of Health and Welfare, Japan.
- [15] Japan Prime Minister's Office (1987). *The opinion poll about women* (Report of an opinion poll in March, 1987). Tokyo: Prime Minister Secretariat public relations office, Prime Minister's Office, Japan.
- [16] Japan Prime Minister's Office (2000). *The opinion poll about a gender-equal society* (Report of an opinion poll in February, 2000). Tokyo: Prime Minister Secretariat public relations office, Prime Minister's Office, Japan.
- [17] Japan Statistics Bureau (1981). *Report on the special survey of the labour force survey, March, 1981* (Investigative Report). Tokyo: Statistics Bureau, Prime Minister's Office, Japan.
- [18] Japan Statistics Bureau (1982). *Annual Report on the Labour Force Survey* (Investigative Report). Tokyo: Statistics Bureau, Prime Minister's Office, Japan.

- [19] Japan Statistics Bureau (1991). *Report on the special survey of the labour force survey, February, 1991* (Investigative Report). Tokyo: Statistics Bureau, Management and Coordination Agency, Japan.
- [20] Japan Statistics Bureau (1992). *Annual Report on the Labour Force Survey* (Investigative Report). Tokyo: Statistics Bureau, Management and Coordination Agency, Japan.
- [21] Japan Statistics Bureau (2001). *Report on the special survey of the labour force survey, August, 2001* (Investigative Report). Tokyo: Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan.
- [22] Japan Statistics Bureau (2002a). *Annual Report on the Labour Force Survey* (Investigative Report). Tokyo: Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan.
- [23] Japan Statistics Bureau (2002b). *Family Income and Expenditure Survey 2002* (Investigative Report; Excel file from URL: <http://www.stat.go.jp/data/soutan/2002n/zuhyou/s03.xls>). Tokyo: Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, Japan.
- [24] Jöreskog, K. G. (2001). *Analysis of Ordinal Variables 2: Cross-Sectional Data* (PDF file in LISREL 8.53).
- [25] Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS Command Language*. Chicago: Scientific Software International.



- [26] Jöreskog, K. G., & Söbom, D. (1993). *LISREL 8: User's reference guide*. Chicago: Scientific Software International.
- [27] Jöreskog, K. G., Söbom, D., Stephen du Toit, & Mathilda du Toit (2000). *LISREL 8: New Statistical Features*. Chicago: Scientific Software International.
- [28] Jöreskog, K. G., & Söbom, D. (1993). *PRELIS 2: User's Reference Guide*. Chicago: Scientific Software International.
- [29] Judge, T. A., Boudreau, J. W., & Bretz, Jr. R. D. (1994). Job and Life Attitudes of Male Executives. *Journal of Applied Psychology*, 79(5), 767-782.
- [30] Kirchmeyer, C. & Cohen, A. (1999). Different strategies for managing the work/non-work interface: a test for unique pathways to work outcomes. *Work & Stress*, 13(1), 59-73.
- [31] Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- [32] Mobley, W. H. (1982). *Employee turnover, causes, consequences, and control*. Addison-Wesley.
- [33] National Institute of Population and Social Security Research (1998). *The second national survey on family in Japan, 1998* (Investigative and Research Report). Tokyo: National Institute of Population and Social Security Research.

- [34] Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81(4), 400-410.
- [35] Nielson, T. R., Carlson, D. S., & Lankau, M. J. (2001). The supportive mentor as a means of reducing work-family conflict. *Journal of Vocational Behavior*, 59, 364-381.
- [36] Parasuraman, S., Purohit, Y. S., & Godshalk, V. M. (1996). Work and family variables, entrepreneurial career success, and psychological well-being. *Journal of Vocational Behavior*, 48, 275-300.
- [37] Quinn, R. P., & Staines, G. L. (1979). *The 1977 Quality of Employment Survey*. Institute of Social Research, University of Michigan, Ann Arbor, Michigan.
- [38] Rothausen, T. J. (1994). Job satisfaction and the parent worker: the role of flexibility and rewards. *Journal of Vocational Behavior*, 44, 317-336.
- [39] Thompson, C. A., Beauvais, L. L., & Lyness, K. S. (1999). When work-family benefits are not enough: the influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. *Journal of Vocational Behavior*, 54, 392-415.
- [40] Watanabe, S. (1994). *The distinction between latent and manifest person-situation relations: Mechanism of the mode transformation and links to situational satisfaction and attachment*. Ann Arbor, MI: UMI.
- [41] Watanabe, S., Takahashi, K., & Minami, T. (1997). The emerging role of diversity and work-family values in a global context. In P.C. Earley & M.

Erez (eds.), *New Perspectives on International Industrial/Organizational Psychology* (pp. 276-318), San Francisco: Jossey-Bass.

## A Measurement Items Composing the Questionnaires

### Turnover Intension

Turnover intention was measured with four-item scales used in previous research (Hendrix, Nestor, & Troxler, 1985; and Watanabe, 1994). They are evaluated in five-point Likert scales anchored: *strongly disagree* (1), *disagree* (2), *neither* (3), *agree* (4), and *strongly agree* (5).

TOI-1. I intend to leave my organization during the next 12 months.

TOI-2. I have searched for an alternative job since I joined this organization.

TOI-3. I will change jobs.

TOI-4. I am actively seeking another employment opportunity.

When we treated missing value as explained in section 3, we used one more item measuring turnover intention below.

TOI-5. Suppose that you are employed on a contract of one year and that the employer asked you to continue to work one more year. Indicate the degree with which you are interested in accepting the offer of continued employment in the following response alternative: *I would definitely*

*reject the offer, (1); I would probably reject the offer, (2); Undecided, (3); I would probably accept the offer, (4); I definitely accept the offer, (5).*

Before treating missing value, this item was reverse coded. Since the measurement model did not indicate good fitting with above five items, we remove TOI-5 from the analysis based on Satorra-Bentler  $\chi^2$  and Cronbach's coefficient alpha.

## **Work-Family Conflict**

Work-family conflict was measured by a 5-item scale developed by Netemeyer et al. (1996). They are evaluated in five-point Likert scales anchored: *strongly disagree (1), disagree (2), neither (3), agree (4), and strongly agree (5).*

WFC-1. The demands of my work interfere with my home and family life.

WFC-2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.

WFC-3. Things I want to do at home do not get done because of the demands my job puts on me.

WFC-4. My job produces strain that makes it difficult to fulfill family duties.

WFC-5. Due to work-related duties, I have to make changes to my plans for family activities.

## Overall Job Satisfaction

Overall job satisfaction was measured with four-item scales developed by Quinn and Staines (1979). Each question and its alternatives are following.

OJS-1 How are you satisfied with your present work?

This item is arranged on four-point scales: *completely dissatisfied* (1), *not too satisfied* (2), *tolerably satisfied* (3), *very satisfied* (4). After that, we grouped (1) and (2) together.

OJS-2 If you can choose your present work or other jobs, which do you choose?

This item is arranged on three-point scales: *I choose a present work without hesitation*, (1); *I evaluate carefully*, (2); *never choose a present work*, (3).

OJS-3 To what extent do you think your present work lives up to your expectation?

This item is arranged on three-point scales: *closely* (1), *so-so* (2), *far below* (3).

OJS-4 If your close friend wants to work your company, what do you suggest to him/her?

This item is arranged on three-point scales: *strongly recommend* (1), *hesitate* (2), *oppose* (3).

When we treated missing value as explained in section 3, we used one more item measuring turnover intention as follows.

OJS-5. If you can get a job as you wish, which do you choose?

This item is arranged on three-point scales: *I want to get a current job*, (1); *I want to leave my job and not to work at all*, (2); *I want to get another job*, (3). Before treating missing value, we grouped (2) and (3) together. Since the measurement model did not indicate good fitting with above five items, we remove OJS5-5 from the analysis based on Satorra-Bentler  $\chi^2$  and Cronbach's coefficient alpha.