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Exploring the determinants of female workers' turnover intention in Japan*

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Abstract

Our study aims to explore the determining factors of female workers' turnover intention in the Japanese labor market as a preliminary to the related data collection planned in the near future. We focus on turnover intention because it is one of the most effective predictors of labor market mobility. We extract nine latent factors, which are grouped into the following five categories: (1) perception of career opportunities at the current firm; (2) anticipation of career opportunities outside the current firm; (3) type of skills or way of doing business of the current firm; (4) individual characteristics; and (5) future prospects of the current firm. One of the most significant results is that, while various factors affect male workers' turnover intention, in case of female workers one of the individual characteristics, namely, positive way of thinking, has the strongest influence, far more than other factors. This finding, among others, seems to suggest that to design further research on the topic. For example, it could be appropriate to include factors such as the orientation towards work-life balance or the availability of an economic safety net for both male and female workers, since the perception of these factors and the resulting behavior or orientation patterns may be strongly related with individual characteristics.

Gender gaps in the Japanese labor market

This study aims to explore the determining factors of female workers' turnover intention in the Japanese labor market. We focus on turnover intention because it is one of the most effective predictors of labor market mobility (Steel, 2002). The critical features of the Japanese labor market include the lack of mobility on one hand and the development of a unique internal market on the other, in which full-time male workers represent the central focus.

It is known that in Japan there are huge discrepancies between male and female workers in many aspects, such as labor force participation rate, type of industry, or sectoral segregation by gender, kind of jobs, skills, wage level, type of labor contracts, and promotions within the organization. This is a partial list of areas where gender discrepancies are observed, with historical, cultural, and managerial factors being all interrelated to the phenomenon.

From the OECD online public database it emerges that in 2014 the labor force participation rate was 70.4% for males whereas 49.2% for females. The share of employees working in service sectors was 82.2% for females and 61.8% for males. Thus, more women are working in service sectors, which is not an unusual pattern compared with other OECD countries. The problem relies in the working conditions imposed by employers, which are particularly poor for part-time workers in service sectors in Japan. There exists a huge gap in the average annual income by gender, and also whether work is full- or part-time. For example, benefits from the seniority wage system under the lifetime employment are mainly given to full-time workers. A huge discrepancy is also present with respect to the share of employed who are managers within the organization (12.0% for males and 0.6% for females in 2014). The female share of seats in the boards of the largest publicly listed companies in the same year points out an even worse situation: In Japan, only 3% of board members are female. There is no comparison with other advanced countries, where the share reaches around 20-30%.

Related literature and development of hypotheses

We attempt to identify the factors that help explain how an individual's turnover intention increases or decreases by using employee-level data collected in February 2013 through a web survey. Specifically, this dataset provides information about turnover intentions, as well as five categories embodying potential explanatory factors. These categories consist of the perception

of career opportunities both inside and outside the current employing firm, skills and way of business at the current firm, individual characteristics, and currently employing firm's future prospects. Within each category, the following explanatory factors are included. In the first category, an employee's own perception of career opportunities in the currently employing firm is defined as "current chance" in this paper. The second category includes the perception of career opportunities at other Japanese firms, defined as "Japanese chance," and the perception of career opportunities at other foreign-owned firms, defined as "foreign chance." As far as skills and business processes are concerned, we measure the degree of firm specificity of skills ("firm-specific skills") and the perception about the effectiveness of firm's way of doing business ("firm effectiveness"). Individual characteristics include: first, positive way of thinking about his/her own life ("positive thinking"); second, whether he/she looks for promotion in the current firm ("upward oriented"); and last, if he/she is anxious about what happens after quitting the current job ("anxiety"). Finally, we measure an employee's perception of future prospects of the current firm within 3 years, defined as "firm prospect." Respondents were asked to rate each question item on a five-point scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"), or 1 ("would be worse") to 5 ("would be absolutely great") depending on the appropriateness for each item.

Turnover intention

Regarding an employee's turnover, Arthur (1992) pointed out that the available Human Resource Management (HRM) practices are two, depending on the considered approach: short-term cost reduction or long-term employee commitment. These two types of HRM practice and their relationship with turnover have been compared and tested empirically (Arthur, 1992; Batt and Colvin, 2011; Tsui et al., 1997). Evidence suggests that long-term commitment practices, which place an emphasis on inducements and investments, are more positively related to lower turnover than short-term cost reduction approaches (Arthur, 1992; Batt et al., 2002; Shaw et al., 1998). Turnover intentions are employed in the core turnover models and are considered to be one of the best predictors of actual turnover (Steel, 2002).

"Turnover intention" (TI hereafter) is defined as an employee's intention to voluntarily change job or company. We employ the TI designed by Kelloway et al. (1999) using a 4-item scale, namely, (1) I am thinking about leaving this organization, (2) I am planning to look for a new job, (3) I intend to ask people about new job opportunities, and (4) I do not plan to be in this organization much longer. TI is the dependent variable in our study.

Perceived career chances at the current firm

There are two forms of career constructs: actual and perceptual (Milkovich et al., 1976). An employee interprets and perceives opportunities and limitations in the current firm relative to his/her own subjective career goals and paths. Then, Kraimer et al. (2011) defined these perceived career opportunities or chances as the employees' perception of the degree at which available work assignments and job opportunities match their career interests and goals. Perceived career opportunity/chance is one of the most important aspects seemingly affecting the employee motivation to perform and to make quit/stay decisions.

The career opportunities/chances perceived by employees inside the currently employing firm have a significant impact on TI, according to Kraimer et al. (2011). From this study, we apply a three-item scale, labeling it "**current chance.**" The three items are: (1) There are career opportunities at this firm that are attractive to me, (2) There are job opportunities available within this firm that are of interest to me, and (3) This firm offers many job opportunities that match my career goals. Consequently, the following hypothesis is drawn.

Hypothesis 1: **"Current chance" is negatively related to TI.**

Anticipation of career chances outside the current firm

Regarding the effect on turnover intentions of anticipated career chances outside the employing firm, there are two types of outside firms, namely other foreign-owned and other Japanese firms. Turnover theorists (e.g., Mobley, 1977; Steer and Mowday, 1981; Steel, 2002) have proposed that job satisfaction and organizational commitment are the key antecedents of turnover intentions, and job search opportunities play a central role in making a turnover decision. However, employees dissatisfied with the current firm do not quit instantly. Rather, they engage in the search of alternative job opportunities at other firms to make a rational decision to quit or not. An anticipation of good career chances at other firms may enhance their intention to quit. Employees differ in their values and beliefs, and thus they use different criteria (wage, job satisfaction, and so on) to evaluate and compare alternative job opportunities. At this stage, it is reasonable to assume that they will take into consideration those career opportunities which they anticipate before moving to an alternative firm. Here, we apply the three-item scale used by Kraimer et al. (2011).

We label an employee's perceived opportunity at other Japanese firms as **"Japanese chance,"**

measured by a three-item scale, namely: (1) There seems to be better career opportunities at the other Japanese firm that are attractive to me, (2) There seem to be better job opportunities available at the other Japanese firm that are of interest to me, and (3) The other Japanese firm seems to offer many job opportunities that match my career goals. Thus, the following hypothesis is posited.

Hypothesis 2: **"Japanese chance" is positively related to TI.**

We call an employee's perceived opportunity at another foreign firm **"Foreign chance,"** measured by a three-item scale, namely; (1) There seem to be better career opportunities at the other foreign firm that are attractive to me, (2) There seem to be better job opportunities available at the other foreign firm that are of interest to me, and (3) The other foreign firm seems to offer many job opportunities that match my career goals. Thus, the following hypothesis is posited.

Hypothesis 3: **"Foreign chance" is positively related to TI.**

Skill characteristics

"Firm-specific skills" are developed within a firm over a relatively long period of time, and usually constitute the competitive advantages of the firm itself. In our study, we suppose that "firm-specific skills" is one of the variables which may plausibly explain turnover intentions (Becker, 1962; Becker, 1964). Tsui et al. (1997), in describing a balanced view of employee-organization relationships, argued that firm-specific skills acquired by those employees in a particular firm are not readily transferable to other firms because the employees trust that such investments will be reciprocated over a long term. Moreover, firm-specific skills acquired in a particular firm are not readily transferable to other firms, because those skills can be most effectively used where they were created and are embodied within each employee. Besides, from a management point of view, employers who value employees' firm-specific skills as an organizational competitive advantage may seek low turnover through HRM practices (Batt and Colvin, 2011). Hence, it is plausible that firm-specific skills based on mutual trust fostered in commitment practices may be associated with lower turnover.

We develop a three-item scale of "firm-specific skills" to measure the degree at which employee's skills and human network are used in the current firm better than in others. The

three items are: (1) What I have experienced so far in this firm, I can only utilize best within this firm, (2) Skills and knowledge I have accumulated in this firm, will be best manifested in this firm, and (3) Human network relationships I have built up within and outside this firm, can be best utilized in this firm. Thus, the following hypothesis is developed.

Hypothesis 4: **"Firm-specific skills" is negatively related to TI.**

"Firm effectiveness" is an employee's perception of how well the current firm will be operating within three years regarding with respect to different aspects. Referring to the multidimensional scale developed by Roth and O'Donnell (1996), we developed a measure of firm effectiveness. Respondents were asked to rate an expected performance of their firms on five dimensions: wage, promotion, work relation with superiors and colleagues, work procedures, and work motivation. In practice, the related question "How do you perceive the following things are going to be in the current firm in three years, better or worse?" concerned six items: (1) salary, (2) promotion, (3) relationship with peer workers or bosses, (4) degree of worth doing your job, (5) way of proceeding job, and (6) career development opportunity. Consequently, the following hypothesis is developed.

Hypothesis 5: **"Firm effectiveness" is negatively related to TI.**

Individual Characteristics

"Positive thinking" indicates an employee's attitude and the way of thinking regarding how he/she manages his/her life (Judge et. al, 2003). The scale applied includes five items: (1) I believe that I can change with my own effort most of what is important in my life, (2) Most things will happen to me in the future depend on my own behavior, (3) I feel I have an outstanding talent, (4) My activity determines what happens in the future, and (5) I believe in the realization of my plan when I initiate it. Thus, the following hypothesis is developed.

Hypothesis 6: **"Positive thinking" is positively related to TI.**

"Upward oriented" measures how much an employee wants to be promoted within the current firm. A four-item scale is used, namely: (1) I wish to be in charge of a job with more responsibility, (2) I will be upset if I could not be promoted from the current position within 3 to

5 years, (3) I will be very happy if I could be promoted in this branch, and (4) I want to be in an upper position (Landau J. et. al, 1996). Thus, the following hypothesis is developed.

Hypothesis 7: **"Upward oriented" is negatively related to TI.**

"Anxiety" measures the degree of anxiety due to uncertainty and expected loss if the employee leaves the current job. The related scale has three items: (1) I am very anxious about what will happen when leaving this firm, (2) I think that many things will confuse me if I leave this firm, and (3) I think of continuing in this firm. Otherwise, I will suffer serious loss (Judge, T. A. et. al, 2003). As a consequence, the following hypothesis is developed.

Hypothesis 8: **"Anxiety" is negatively related to TI.**

Current firm's future prospects

"Firm prospect" measures how an employee perceives the future prospects of the currently employing firm. In this respect, we develop a five-item scale, namely: (1) This firm's future is promising, (2) I feel excited when I think of this firm's future, (3) I believe this firm's future is hopeful, (4) I feel this firm has great possibilities, and (5) I think that this firm will continue to expand. Then, the following hypothesis is developed.

Hypothesis 9: **"Firm prospect" is negatively related to TI.**

Moderation of the effect of individual characteristics on TI by "firm prospect"

For both males and females, the causal relationship between an employee's individual characteristics and his/her TI will vary depending on how he/she perceives the future prospects of the current firm. Therefore, we test how "firm prospect" moderates the effect of individual characteristics on TI. Thus, the following three hypotheses are posited.

Hypothesis 10: **"Firm prospect" moderates the effect of "positive thinking" on TI.**

Hypothesis 11: **"Firm prospect" moderates the effect of "upward oriented" on TI.**

Hypothesis 12: **"Firm prospect" moderates the effect of "anxiety" on TI.**

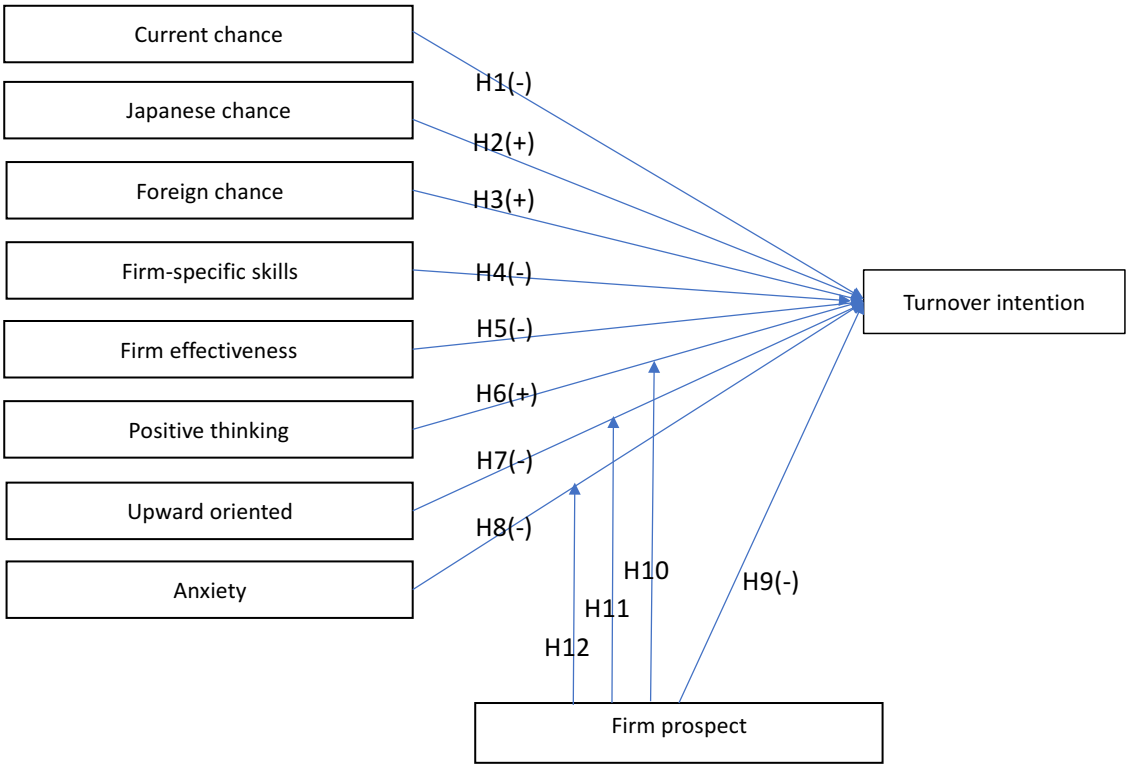

Figure 1: A study model to explore the effects of 9 factors on turnover intention

Results and discussion

Sample

We collected data on employees' workplace from monitor members of a marketing company using a web survey administered in Japan in February 2013. The respondents were paid with internet service points. Randomly selected 7,564 people were requested to respond to a questionnaire, of which 583 (7.7%) usable questionnaire responses were returned (457 males, 126 females). All respondents were full-time workers, and the number of females aged 40 or less was 70 (56%), whereas those over 40 years old were 56 (44%). As for males, 156 (34%) were under 40, and 301 (66%) over 40. The breakdown by position in the firm is shown in Figure 2, which highlights a clear-cut gender difference. Not surprisingly, only a few, quite exceptional females occupied upper positions.

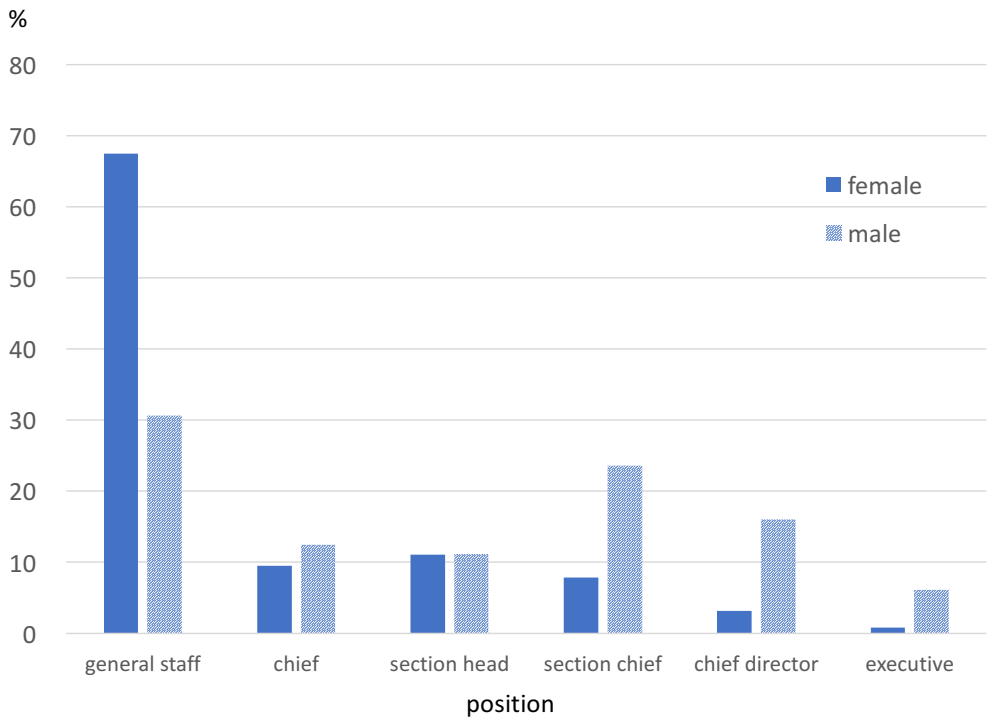

Figure 2 Breakdown by position

Factor analysis, reliabilities, and correlations

We conduct a factor analysis to reduce 39 observable variables to ten latent factors. The extraction method used is maximum likelihood with promax rotation. The results are shown in Table 1. Means, standard deviations, reliabilities, and correlations among the extracted factors are presented in Table 2; (a) for females and (b) for males.

We conduct t-tests to compare the means between males and females. "Current chance," "foreign chance," and "firm-specific skills" are significantly different between the two groups. For female workers, "current chance" is significantly lower than that for male workers *(M female* = 2.4, *SD female* = 1.207 vs. *M male* = 2.673, *SD male*= 1.134), with t (581) = 2.36, p <.05. "Foreign chance" and "firm-specific skills" are also significantly lower for females than for males, for the former, *M female* = 2.355, *SD female* = 1.256 vs. *M male* = 2.621, *SD male*= 1.058 with t (581) = 2.18, p <.05, and for the latter, *M female* = 2.270, *SD female* = 1.094 vs. *M male* = 2.624, *SD male*= 1.106 with t (581) = 3.19, p <.01. However, these findings should be interpreted with caution since the organizational and personal characteristics are not controlled

Table 1 Results of factor analysis

	1 firm prospect	2 firm effectiveness	3 positive thinking	4 turnover intension	5 foreign chance	6 Japanese chance	7 upward oriented	8 anxiety	9 firm-spec skills	10 current chance
hopeful	**0.968**	0.026	−0.015	0.025	0.019	−0.028	−0.043	0.018	0.012	−0.029
promising	**0.936**	−0.007	−0.023	0.001	−0.044	−0.007	−0.005	0.007	−0.024	0.035
excited future	**0.918**	−0.001	−0.045	0.052	0.038	−0.013	0.009	−0.001	0.013	0.008
continue to expand	**0.917**	0.002	0.045	−0.017	−0.038	0.041	−0.018	−0.006	0.007	−0.017
great possibility	**0.889**	0.023	0.075	−0.038	0.033	0.007	−0.030	−0.015	0.028	−0.038
proceeding job	−0.045	**0.909**	0.060	−0.011	0.034	0.002	−0.069	0.015	0.067	−0.084
worth doing job	−0.038	**0.896**	−0.019	−0.015	0.007	−0.010	0.006	−0.007	0.077	−0.031
career development	−0.030	**0.880**	0.022	0.010	0.004	−0.011	−0.063	−0.007	0.024	0.005
human relationship	−0.032	**0.789**	0.054	0.018	−0.045	0.025	0.022	0.028	−0.015	−0.001
promotion	0.089	**0.703**	−0.065	0.003	0.009	−0.013	0.086	−0.030	−0.094	0.054
salary	0.166	**0.601**	−0.074	0.017	−0.007	0.012	0.057	−0.018	−0.134	0.107
depends on my act	−0.041	−0.007	**0.943**	−0.006	0.000	−0.031	−0.053	0.034	−0.027	−0.020
activity determines	−0.033	0.037	**0.852**	−0.015	−0.008	0.007	−0.081	0.073	0.008	0.024
change by my effort	−0.016	−0.010	**0.833**	0.021	−0.005	−0.009	0.030	−0.035	−0.023	−0.016
outstanding talent	0.077	−0.054	**0.629**	−0.052	0.042	−0.001	0.166	−0.121	0.023	0.041
realization of plan	0.109	0.036	**0.606**	0.051	−0.023	0.050	0.061	0.026	0.002	0.016
look for new job	−0.008	0.024	−0.001	**0.961**	−0.033	0.000	0.033	−0.007	0.019	−0.002
think to quit	0.004	−0.052	0.021	**0.896**	−0.014	0.025	−0.028	0.005	−0.022	0.002
ask people	0.051	0.031	−0.095	**0.847**	0.016	−0.007	0.080	0.031	0.013	0.020
not plan to stay	−0.027	0.001	0.118	**0.829**	0.029	−0.028	−0.066	−0.024	0.016	−0.021
interesting job	0.008	−0.018	0.038	−0.014	**0.965**	−0.001	−0.016	−0.004	−0.009	0.002
match my goal	0.008	0.016	−0.008	−0.001	**0.959**	−0.001	0.027	0.000	−0.019	0.000
career opportunity	−0.011	0.006	−0.030	0.012	**0.956**	0.019	−0.001	0.008	0.025	0.018
interesting job	−0.011	0.002	0.022	0.004	−0.017	**0.956**	−0.016	0.002	−0.004	0.027
career opportunity	0.004	0.019	−0.015	−0.001	0.022	**0.935**	0.011	−0.003	0.004	−0.020
match my goal	0.005	−0.018	−0.009	−0.012	0.010	**0.935**	0.005	0.007	0.008	−0.010
upper position	−0.038	0.009	−0.005	0.001	−0.052	0.042	**0.890**	−0.006	−0.033	−0.006
position in 3-5 yrs	−0.104	−0.056	0.012	0.048	0.074	−0.024	**0.804**	0.069	0.026	−0.109
promotion here	0.143	0.056	−0.007	−0.071	0.003	−0.027	**0.753**	0.029	0.015	−0.024
more responsibility	−0.044	0.018	0.032	0.051	−0.015	−0.001	**0.722**	−0.071	0.009	0.110
confusing	−0.011	−0.023	0.006	0.025	0.047	−0.011	−0.011	**0.965**	−0.050	−0.001
anxious if I leave	−0.010	0.010	0.002	0.053	−0.011	0.031	0.003	**0.900**	−0.003	−0.022
suffer loss if quit	0.041	0.011	0.011	−0.104	−0.048	−0.022	0.043	**0.740**	0.060	0.050
my skills	0.001	0.009	−0.001	−0.010	−0.001	0.001	−0.034	−0.051	**0.982**	−0.023
my human network	0.044	−0.046	−0.022	0.071	0.005	0.023	0.026	0.042	**0.783**	0.033
my experience	0.079	0.030	−0.007	−0.046	−0.008	−0.018	0.038	0.064	**0.725**	0.049
interesting job	−0.025	0.009	0.037	−0.029	−0.010	0.019	−0.019	−0.017	0.050	**0.913**
match my goal	0.071	0.026	−0.026	0.018	−0.017	−0.006	−0.011	0.009	0.017	**0.879**
career opportunity	0.039	0.029	0.013	0.017	0.057	−0.017	−0.013	0.024	−0.028	**0.860**
correlations 1		0.592	0.222	−0.200	0.289	0.215	0.347	0.289	0.590	0.663
2			0.179	−0.295	0.228	0.179	0.341	0.210	0.450	0.590
3				0.444	0.383	0.271	0.341	−0.125	0.159	0.259
4					0.254	0.184	0.163	−0.342	−0.302	−0.165
5						0.418	0.390	−0.013	0.192	0.422
6							0.299	0.129	0.300	0.328
7								0.142	0.245	0.371
8									0.543	0.165
9										0.586

Table 2 Means, standard deviations, correlations and reliabilities

(a) female	M	SD	1	2	3	4	5	6	7	8	9	10
1 turnover intension	2.252	1.322	(.937)									
2 current chance	2.400	1.207	.088	(.985)								
3 Japanese chance	3.579	1.080	.387**	.466**	(.966)							
4 foreign chance	2.355	1.256	.363**	.525**	.641**	(.943)						
5 firm specific skills	2.270	1.094	-.018	.604**	.461**	.401**	(.886)					
6 firm effectiveness	2.995	0.767	-.187*	.549**	.254**	.330**	.337**	(.905)				
7 positive thinking	3.071	0.998	.605**	.408**	.586**	.559**	.304**	.213*	(.976)			
8 upward oriented	2.496	1.096	.194*	.424**	.388**	.448**	.351**	.308**	.303**	(.946)		
9 anxiety	2.802	1.241	-.177*	.167	.154	.046	.486**	.204*	-.013	.272**	(.889)	
10 firm prospect	2.200	1.217	-.051	.702**	.397**	.524**	.614**	.563**	.321**	.454**	.285**	(.86)

Note: n=126,
*p<.05, **p<.01

(b) male	M	SD	1	2	3	4	5	6	7	8	9	10
1 turnover intension	2.115	1.130	(.905)									
2 current chance	2.673	1.134	-.227**	(.973)								
3 Japanese chance	3.452	0.874	.096*	.261**	(.959)							
4 foreign chance	2.621	1.058	.212**	.377**	.320**	(.947)						
5 firm specific skills	2.624	1.106	-.345**	.573**	.230**	.123**	(.91)					
6 firm effectiveness	2.990	0.644	-.287**	.590**	.141**	.193**	.465**	(.906)				
7 positive thinking	3.091	0.906	.353**	.230**	.142**	.314**	.122**	.181**	(.963)			
8 upward oriented	2.680	1.052	.165**	.289**	.232**	.335**	.188**	.304**	.349**	(.909)		
9 anxiety	2.996	1.172	-.363**	.186**	.116*	-.026	.526**	.202**	-.125**	.099*	(.893)	
10 firm prospect	2.306	1.014	-.223**	.640**	.131**	.193**	.586**	.574**	.212**	.240**	.289**	(.87)

Note: n=457,
*p<.05, **p<.01

for. Indeed, the organizational characteristics like size, type of industry, and performance indexes such as sales turnover and profit, or respondents' age, sex, position, and firm tenure are not the same between the two groups, and might cause the differences.

Regression analysis results and discussion

First of all, we run stepwise regressions for males and females separately by including all nine explanatory variables and three interaction terms in order to select the predictor variables to be included in the regression analysis for gender comparison. Conditions for the selection are the following ones: (1) being significant in at least one stepwise regression and (2) being a variable to be used for the calculation of the interaction terms even if it is not significant by itself. As a result, only one interaction term is excluded, namely firm prospect x anxiety, as it is not significant for either males or females. Thus, Hypothesis 12 is rejected for both groups.

Then, we perform a hierarchical regression analysis for females and males, respectively. After controlling for age in step 1, we include the nine predictor variables in step 2, and then two interaction terms in step 3. We use z scores of the predictor variables to calculate the interaction terms. The results of the hierarchical regression analysis are shown in Table 3.

As shown in the table, a distinctive overall difference can be observed. For females, only two factors are significant, but the adjusted R^2 is .636, larger than that for males (R^2=.424), where many factors are significant. Here, we can confirm how large the effects of these two factors are for females. Other factors such as opportunities outside the current firm or firm specificity of skills that female workers possess do not significantly increase or decrease turnover intentions, which maybe suggesting that females prefer employment stability more than males. This important point will be discussed in the following.

Hypothesis 1, predicting the negative effect of "current chance" on TI, is supported for males (β=-0.179, p<.01) but not for females (β=0.09, n.s.). The same tendencies emerge for other firms regardless of the nationality of parent companies. Hypothesis 2 and 3 are also supported for males but not for females. Specifically, if a male anticipates career opportunities in other Japanese or foreign firms as being hopeful, his TI tends to increase (β=0.096, p<.05 for "Japanese chance," and β=0.166, p<.01for "foreign chance"). However, the effects of career chances in other Japanese or foreign firms are not significant for females. This seems to suggest that female workers are not looking for further career development opportunities as eagerly as male workers or, at least, their perception of career development chances inside and/or outside

Table 3 Regression results for predicting turnover intention

	(a) female			(b) male		
		β	t-value		β	t-value
Step 1				Step 1		
	AGE	-0.316	-3.715**		AGE	-0.135	-2.898**
R^2			0.100**	R^2			0.018**
Step 2				Step 2			
	AGE	-0.259	-4.126**		AGE	-0.140	-3.766**
	current chance	0.081	0.842		current chance	-0.166	-2.937**
	Japanese chance	0.071	0.821		Japanese chance	0.103	2.617**
	foreign chance	0.091	1.007		foreign chance	0.155	3.632**
	firm specific skills	-0.101	-1.101		firm specific skills	-0.165	-3.029**
	firm effectiveness	-0.335	-4.420**		firm effectiveness	-0.249	-5.161**
	positive thinking	0.583	7.525**		positive thinking	0.322	7.877**
	anxiety	-0.038	-0.517		anxiety	-0.193	-4.348**
	upward oriented	0.099	1.382		upward oriented	0.119	2.842**
	firm prospect	-0.126	-1.289		firm prospect	0.048	0.916
$\triangle R^2$			0.499**	$\triangle R^2$			0.402**
Step 3				Step 3			
	AGE	-0.241	-4.169**		AGE	-0.123	-3.345**
	current chance	0.090	1.021		current chance	-0.179	-3.200**
	Japanese chance	0.051	0.636		Japanese chance	0.096	2.467*
	foreign chance	0.071	0.839		foreign chance	0.166	3.935**
	firm specific skills	-0.107	-1.242		firm specific skills	-0.159	-2.955**
	firm effectiveness	-0.333	-4.814**		firm effectiveness	-0.230	-4.801**
	positive thinking	0.589	7.917**		positive thinking	0.297	7.220**
	anxiety	-0.062	-0.925		anxiety	-0.203	-4.637**
	upward oriented	0.062	0.919		upward oriented	0.129	3.100**
	firm prospect	-0.135	-1.483		firm prospect	0.066	1.242
	prosppositive	0.146	2.170*		prosppositive	0.126	3.127**
	prospupward	-0.308	-4.916**		prospupward	-0.123	-3.189**
$\triangle R^2$			0.072**	$\triangle R^2$			0.019**
F			19.230**	F			28.960**
Adjusted overall R^2			0.636**	Adjusted overall R^2			0.424**

Note: *p< .05, **p<. 01, n=126 for female, n=457 for male
prosppositive = firm prospect x positive thinking, prospupward = firm prospect x upward oriented

the current employer does not significantly affect the level of TI.

Hypothesis 4 predicts that "firm-specific skills" is negatively related to TI. The hypothesis is supported for males (β=-0.159, p<.01) but not for females (β=0.107, n.s.). According to the t-test results on the two means, females' perceptions of firm specificity of skills are significantly lower than those for males (*M female* = 2.270, *SD female* = 1.094 vs. *M male* = 2.624, *SD male*= 1.106), with t (581) = 3.19, p <.01). Not only "firm-specific skills" themselves do not affect the TI of females, but the perception of firm specificity of skills of female is quite low to begin with. This may imply that a female worker may not seek for career development or promotions so much and rather prefer job security or stability, resulting in less interest in accumulating "firm-specific skills" which would be most effectively used under the current circumstance. This result is consistent what has been widely said about HRM practice of Japanese firm. Lifetime employment system accompanied with employee's firm specificity of skills are mainly applicable to workers at production site or male white-collar workers with Japanese nationality.

Hypothesis 5 predicts that "firm effectiveness" is negatively related to TI. The hypothesis is supported for both females (β=-0.333, p<.01) and males (β=-0.23, p<.01). If an employee perceives that the current employer is operating business effectively and will keep doing so for

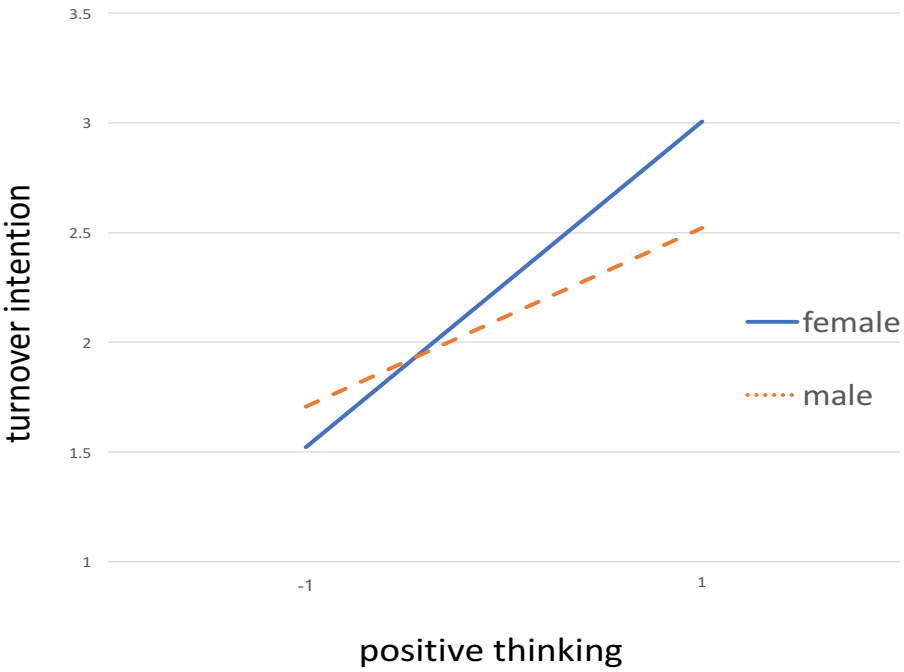

Figure 3 Effects of positive thinking and interaction

next three years at least, he/she has less incentive to look for another job opportunity, as expected.

Moving to individual characteristics, Hypothesis 6 predicts that "positive thinking" is positively related to TI. The hypothesis is supported for both females (β=0.589, p<.01) and males (β=-0.297, p<.01). Specifically, the magnitude of the effect is very high for females. The gender comparison of "positive thinking" and TI is depicted in Figure 3. The slope of the regression line for females is steeper than that for males.

As for the second factor of individual characteristics, Hypothesis 7 predicts that "upward oriented" is negatively related to TI. The hypothesis is not supported for females (β=-0.062, n.s.). As for males, "upward oriented" is significantly positively related to TI (β=0.129, p<.01), which is the opposite direction to the hypothesis. "Upward oriented" tells if the employee wishes to be promoted in the current firm, which possibly measures or at least puts emphasis on upward orientation not necessarily in the current firm. Thus, if upward orientation is high, the employee tries to look for career opportunities, no matter where. For females, upward orientation itself may not constitute a critical aspect in her life.

Hypothesis 8, predicting the negative effect of "anxiety" on TI, is supported for males (β=-0.203, p<.01) but not for females (β=-0.062, n.s.). In the Japanese society, it seems to be common sense that a man should be economically independent and assume supporting duty for his family. This socially accepted idea may make a man anxious if he is unemployed even for a short period of time.

Hypothesis 9 predicts that "firm prospect" is negatively related to TI. The hypothesis is not supported for females (β=-0.135, n.s.) nor for males (β=0.066, n.s.).

To test Hypothesis 10, which predicts that "firm prospect" moderates the relationship between "positive thinking" and TI, we introduce the interaction terms "prosppositives", standing for "firm prospect" x "positive thinking", which turn out to be significant for both females (β=0.146, p<.05) and males (β=0.126, p<.01). To facilitate the interpretation of the interactions, as recommended by Aiken & West (1991), we plot the nature of the interactions in Figure 4 (a) and (b). For both males and females, it is observed that when firm's "future prospects" are perceived as low, people with high "positive thinking" try to look for job opportunities outside the current firm. This trend is stronger for female workers, with "turnover intention" spreading from around 1.6 of low "positive thinking" to almost 3.5 of high "positive thinking", while the corresponding figures for males are 1.8 and about 3.0, respectively. Moreover, it seems that the way of thinking is quite influential on women's career development.

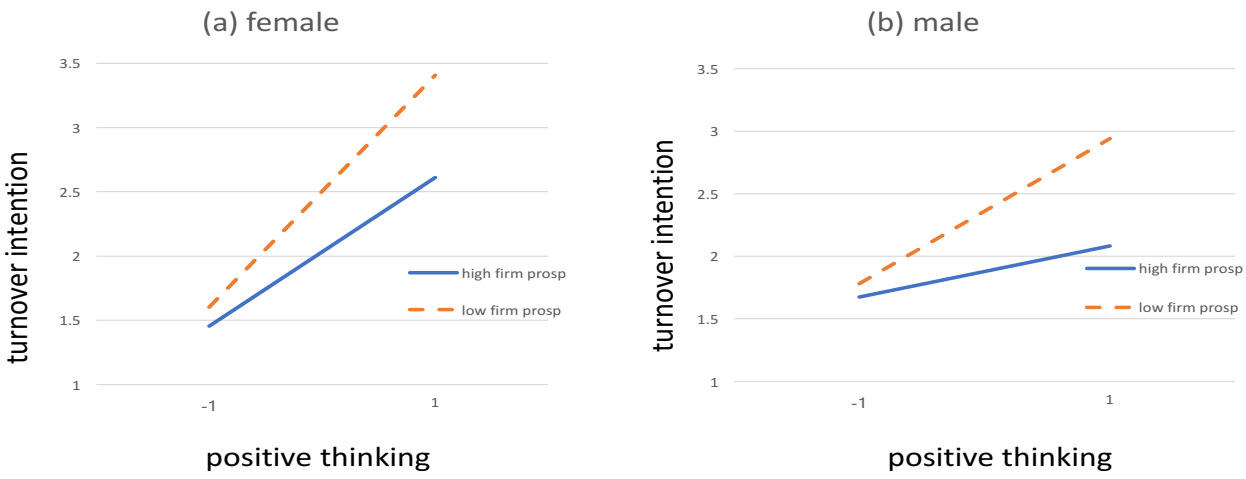

Figure 4 Moderation of the effect of positive thinking by firm prospect

If high "firm prospect" is perceived, men do not look for a job outside regardless of the way of thinking. On the other hand, women with "positive thinking" seek job opportunities outside more than those with less "positive thinking." We can confirm a larger moderation of the effect of positive thinking on TI by "firm prospect" for males than for females, since the slopes of the two regression lines are more diverse for the former.

To test Hypothesis 11, which predicts that "firm prospect" moderates the relationship between "upward oriented" and TI, we introduce the interaction terms "prospupward", standing for "firm prospect" x "upward orientation", which turn out to be significant for both females (β=-0.308, p<.01) and males (β=-0.123, p<.01). We also plot the nature of the interactions in Figure 5 (a) and (b). Table 3 depicts that "upward oriented" is significantly positively related with "turnover intention" for males, thus not supporting Hypothesis 7 that predicts a negative relationship instead. If the current "firm prospect" is low, "turnover intention" will be higher with less steep inclination than when "firm prospect" is high; this is true for both females and males. We can observe the differences in the degrees of inclinations between high and low groups in females and males. These differences suggest that the moderation effect is greater for females. The TI of the group with high prospect is strongly affected by the level of upward orientation, particularly for females. The effect of "upward oriented" on IT may offset between

high and low prospect groups for females, resulting in no significance of the effect of "upward oriented" alone (β=0.062, n.s.), as shown in Table 3.

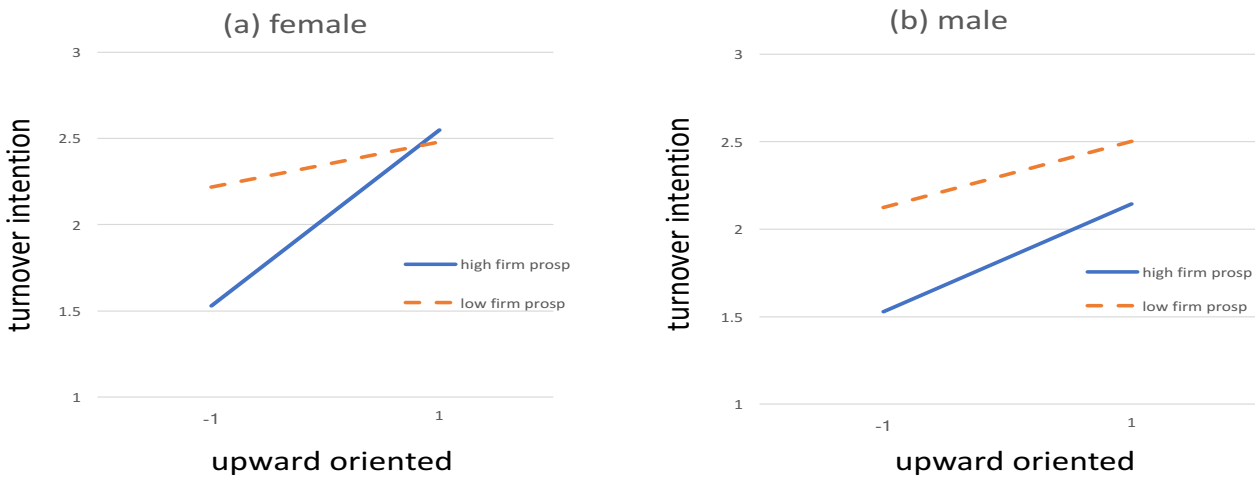

Figure 5 Moderation of the effect of upward oriented by firm prospect

Implications for further research

We may summarize the findings of this study as follows. First, the most influential factor determining the level of turnover intention for females is the positive way of thinking. The level of influence is much higher than expected. On the other hand, other factors which are significant for males do not show significant effect on TI for females; this occurs, for example, with perceived career opportunities inside and outside the current employer, firm-specificity of skills, and anxiety. These factors do not increase the level of turnover intention.

To explain the low level of influence of most factors, Figure 2 may be helpful, as it shows the breakdown of workers by hierarchical position. Most female respondents are general staffs, whereas males' positions are dispersed at various levels. Women may be accepting the existence of a "glass ceiling" in the Japanese society, which may discourage changing jobs unless much

better opportunities are offered. Another possible interpretation is that women may prefer stability rather than mobility compared to men. One of the reasons for this can be the difference in the economic safety net available, such as parents, spouses, etc. In the Japanese society, men dispose a weaker net with respect to women.

Taking the above discussions and implications into account, we must consider new elements to be included in order to clarify these points further. For example, self-evaluation and ways to improve skills, managerial implications regarding skill acquiring methods, personal evaluation system, orientation of work-life balance, and so on may be added to the future research agenda.

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