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Effects of wage and promotion incentives on the motivation levels of Japanese employees

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Abstract

Purpose: This study focuses on the incentive effects in Japanese organizations where job security is valued. In particular, the study investigates the relative strengths of the effects of wage and promotion incentives on employees' motivation.

Design: A survey was conducted involving 1,823 Japanese employees working at the group companies of Toyota Motors. Multiple regression analyses were performed to separately analyze the effects on white-collar ($n = 928$) and blue-collar workers ($n = 818$).

Findings: The results showed that both promotion and wages positively influence employees' work motivation. A comparison of the relative strengths of the effects reveals that fair promotion was a more powerful motivator than wage level and wage increase.

Value: The reason why fairness in promotion was more effective than wage to motivate employees was discussed in light of the unique career system existing in Japanese companies and the agency problems between companies and their supervisors.

It is often stated that the career systems in Japan are characterized by slow promotion and low wage inequality (Cole, 1971; Ouchi, 1981). In general, organizations offer their employees three types of opportunities (Ospina, 1996): promotion, pay, and challenges at work. These three benefits, i.e., rapid advancement in gaining higher positions, a high level of compensation, and engagement in interesting and challenging work, contribute to the improvement of workers' motivation and job satisfaction. In comparison with the quick promotions and rapid wage increases prevailing in Western systems, the lagging promotion and low wage differentials observed in Japanese career systems may not be readily welcomed by employees in any other nation. These practices may be less beneficial to maximize employee interests; thus, they may demotivate employees and reduce their commitment. However, many believe that this is not the case. Therefore, it is noteworthy to question why these apparently unbeneficial characteristics are relevant and valid. The rationale for their validity is provided by the internal labor market and tournament theories.

According to the internal labor market theory (Doeringer & Piore, 1971), the recruitment of the workforce from the external labor market is limited to a small variety of entry jobs. The rest of the job openings are generally filled in internally by the employees of the organization. If the skills and abilities required to perform jobs are mainly specific to the company and they are difficult

to acquire from external sources, companies aim to develop the necessary skills and abilities via internal training. In order to develop skills and abilities specific to the company, it is significant from an organizational perspective to retain employees for a long period and promote them in accordance with their company-specific skills and abilities. On the other hand, employees consider it appealing to be able to obtain desirable positions preferentially through internal advancement. A number of researchers indicated that employment practices in Japanese organizations exhibit characteristics of the internal labor market (e.g., Jacoby, 1985; Morishima, 1996) and promotion opportunities increase the level of organizational commitment among workers in the internal market (Lincoln & Kalleberg, 1990). Therefore, it is clear that career advancement influences the workers' behaviors and attitudes, such as motivation and organizational commitment, particularly in the case of stable employment.

Tournament theory (Lazear & Rosen, 1981; Rosenbaum, 1984) states that when an organization insufficiently monitors its employees' behaviors such that it possesses imperfect information regarding employees' skills and abilities, it is effective to administer a competition of career advancement based on the indication of their exhibited abilities, i.e., the rank order of job performance that reflects employees' skills and abilities demonstrated on the job. If tournament participants recognize that rewards presented to winners, i.e., prestigious positions and consequential wage premiums, are attractive, they will work very hard in pursuit of the prizes. In other words, winnings from career competition and the resulting wage differentials between the promoted and non-promoted employees are incentives to work hard and perform well.

A few studies investigated whether the characteristics of tournament theory amply described the career systems in Japanese organizations. For instance, while surveying the career paths in a large Japanese departmental store, Wakabayashi (1987) found the existence of the tournament-type promotion system at the store. He reported that the careers of the fast- and slow-trackers were differentiated in their initial years in the company, indicating that promotion in the first three years predicted the results of career advancement in the thirteenth year. Sekimoto and Hanada (1985, 1986) analyzed the survey results of 11 companies and found that traditional, conservative companies screened prospective employees through a tournament competition at multiple stages with no second chances, while innovative companies organized a contest competition in which employees freely and openly competed and had the opportunity of a return match. Similarly, Takeuchi (1995) analyzed the career trees of employees in a large Japanese insurance company and found that employees were provided with opportunities of *repechages* or consolation matches in the early stages and later for those of pure tournaments. In short, the career development system in Japanese organizations is characterized, in principle, by a promotion tournament although a few deviations from this pure form have been observed.

In the internal labor markets, the prestige of higher positions rather than higher wages

stimulates employees to work hard to win the competition. Promotion acts as an incentive mechanism, provided employees value the higher positions. In the context of long-term employment, which is common in the internal markets, it is reasonable that the speed of advancement is lagged because slow promotion causes employees to stay in the promotion competition for a long time, and it maintains a high level of motivation. It also avoids demotivating those who were dropping from the fast track. A deferred showdown of the final result maintains a high motivation and high career expectations for a long period.

On the other hand, career development in the U.S. is characterized by quick promotions and rapid wage increases. In the system characterized by short-term employment with a high turnover, employees do not develop their careers in any single organization. Instead, they accumulate work experience and expertise by taking up stepping-stone jobs in different organizations. The prestige of holding higher ranks in organizations is not significant for those who plan their careers with frequent job changes. Conversely, the result of promotions will be crucial to these people. Higher wages that are contingent on higher positions will persuade them to participate in the promotion competition in an organization. Employees who are pursuing a multi-organizational career are mainly stimulated by the wage level and perceive promotion as an instrument for a wage increase. It is not the promotion but its result that is considered valuable. In other words, wage incentives function as a dominant force of motivation for those with short-term, transitional career goals.

In short, the two incentives that drive employees to participate in the career competition are wage increase and promotion. According to the tournament theory (Rosenbaum, 1984), the effectiveness of these incentives depend on the presence of job security, i.e., the promotion opportunities motivate employees when job security is maintained, while they are motivated by wages when employment is unstable. In other words, promotion acts as a long-term incentive for those with long and stable employment relationships with their organizations, while wage increase acts as a short-term incentive when employment relationships are unstable and uncertain.

Purpose

This study aims to investigate the relative strengths of two incentive effects that function in Japanese organizations where job security is valued. In particular, this study scrutinizes the effects of wage and promotion incentives on motivation. It attempts to verify the following hypothesis:

H: In Japanese companies, the effect of promotion on employee motivation is stronger than that of wage increase.

Method

Data

The subjects for this study were drawn from among the union members of the group companies of Toyota Motors. Two thousand questionnaires were sent to employees who were employed in 75 companies of Toyota Group; of these, a total of 1,823 questionnaires were returned. The response rate was 91.2%. Of the total number of respondents, 1,729 were males (94.8%) and 92 were females (5%). The male workers dominated the sample because the survey targeted manufacturing companies that employ a number of plant workers mainly comprising males. Note that the results of this survey depict an image of male dominated workplaces in the Japanese manufacturing industry. In order to represent the subjects' sex, a variable "male" was employed such that 1 denoted males and 0 denoted females.

The average age of the sample was 37.2 (*s.d.* = 7.6). The subjects' ages ranged widely from 20 to 59 years: the numbers of subjects in their 20s, 30s, 40s, and 50s were 275 (15.1%), 890 (48.8%), 502 (27.5), and 147 (8.1%), respectively. The average years of work experience (tenure) in their current organizations was 16.7 years (*s.d.* = 8.1). Combined with the information of the average age, a typical subject begins his/her career at the age of 20 and continues employment with the same employer.

Their educational levels varied to a large extent. The sample comprised 69 secondary-school graduates (3.8%), 961 high-school graduates (52.7%), 173 two-year college graduates (9.5%), 511 four-year college graduates (28.1%), and 97 subjects who were enrolled in graduate school (5.3%). These educational levels indicated that manufacturing companies require a diverse work force with various skills and expertise. The educational levels can be categorized into three classes for the purpose of analysis. Secondary school education is denoted by 1, high school and junior college education is denoted by 2, and education higher than the university level is denoted by 3.

The sample comprised 928 white-collar workers (50.9%), 818 blue-collar workers (44.9%), and 77 workers whose designations were unknown (4.2%). The composition of the sample appeared to be a good representative of the Japanese labor force. Since this sample possessed a balanced number of white- and blue-collar workers, it allowed a comparison of the same analyses that were applied to both white- and blue-collar workers.

Questionnaire

This study mainly aimed to investigate the effects of career-related factors on motivation. In particular, it attempted to understand the incentives that motivate employees to work hard. The questionnaire included three sets of independent variables: wage incentives, promotion incentives, and job characteristics. Based on this, the strength of effects of incentives such as those related to

wage and promotion, and the nature of the job was analyzed.

First, the effect of wage incentives on motivation levels was analyzed. Monetary incentives were expected to be derived from two characteristics of wages, i.e., wage increase and the wage level relative to that of coworkers. The variables representing the wage increase and relative wage level are included. The wage increase was determined by the following question: Did your earnings from the company change since last year? The responses were measured on a three-point scale ranging from “decreased (1),” “unchanged (2),” and “increased (3).” In order to evaluate the relative wage level, the subjects were asked the following question: Where do you think your earnings lie in the range of earnings of employees who share similar characteristics in terms of sex, age, education, and responsibilities? The scale assigns a value of 1 to the lowest 20 percentiles, 2 to the lower-middle 20 percentiles, 3 to the middle 20 percentiles, 4 to the upper-middle 20 percentiles, and 5 to the upper 20 percentiles.

The second source of incentives is related to promotion. In general, employees are willing to work hard in pursuit of promotions. Since promotion is very appealing, regardless of the consequential wage increase, it has strong incentive effects. Incentives via promotion are represented by two variables: promotion difficulty and promotion fairness. The incentive of promotion is minimal if employees find it difficult to be promoted to higher positions in the current promotion system. Therefore, promotion difficulty is considered to be the opposite of promotion incentive. To measure the difficulty of promotion, subjects were asked to respond to the following question: According to you, in what manner will the promotion policy of your company change in the future? The responses ranged from “to be generous (1)” to “to be strict (5).” The second variable is the degree to which the practice of promotion is fair and just. The fairness of promotion was measured on a five-point scale ranging from “unfair (1)” to “fair (5).”

Hackman and Oldham’s (1976) theory of job characteristics suggested that the nature of the job itself is an important source of motivation. This theory advocated that the nature of the job, rather than the pay and promotion, has mechanisms to motivate employees. The present study sheds light on four characteristics of a job: the range of responsibilities, the level of discretion, the knowledge and skills required, and the opportunities for skill development. These four variables were measured by the question: To what degree have the following aspects of jobs changed in the last three years: the range of responsibilities, the range of discretion, the knowledge and skills required, and opportunities for skill development? The first two variables were measured by a three-point scale where 1, 2, and 3 denoted “became narrower,” “unchanged,” and “became wider,” respectively. Similarly, the last two variables were measured with a three-point scale where “decreased,” “unchanged,” and “increased” were denoted by 1, 2, and 3, respectively.

The level of motivation was set as the dependent variable in this study. Although the construct of motivation can be operationally defined with the help of resembling variables such as

motives, needs, values, and dispositions (Hogan & Hogan, 1990), the field of psychology has not observed a single, decisive measure of motivation. Therefore, this study measures motivation by a single straightforward item: How has the level of your work motivation level changed in the last three years? The responses ranged from “decreased (1)” to “increased (5).”

Multivariate regression analyses were conducted separately for the white- and blue-collar samples. Demographic, wage incentive, promotion incentive, and job characteristics variables were regressed onto the level of motivation in order to investigate the relative strength of the effects.

Results

Table 1 presents the results of the separate multivariate regression analyses for white- and blue-collar workers. The analysis of white-collar workers is shown in the left column in Table 1. The results found a significant F statistic ($F_{(11, 886)} = 27.17, p < .001$) with a moderately high coefficient of determination ($R^2 = .25$). Differences in sex and education had no effect on the motivation levels of white-collar workers. The variables “male” ($\beta = -.02, t = .69, n.s.$) and “education” ($\beta = .00, t = .09, n.s.$) yielded non-significant beta coefficients. However, employees with longer tenures exhibited a higher level of motivation ($\beta = .11, t = 3.12, p < .01$).

The effects of wage incentives were apparent. The wage level ($\beta = .08, t = 2.47, p < .05$) and wage increase ($\beta = .07, t = 2.34, p < .05$) raised the motivation levels among white-collar workers. The wage increases and the wage level that was higher than that of the coworkers significantly changed their intention to work.

With regard to promotion, promotion difficulty is considered to lower employees’ motivation. However, the results found no clear negative effect. Instead, it was found that the effect of promotion difficulty on motivation was not significant ($\beta = .04, t = 1.39, n.s.$), indicating that vague career perspectives did not affect motivation. On the other hand, fairness in the practice of promotion exerted a strong influence ($\beta = .23, t = 7.24, p < .001$), suggesting that the promotion system functioned as a motivator if administered in a fair and just manner.

The job characteristics were important elements for encouraging hard work. The expansion of discretion ($\beta = .17, t = 4.95, p < .001$), knowledge and skills ($\beta = .09, t = 2.71, p < .01$), and developmental opportunities ($\beta = .23, t = 7.61, p < .001$) increased the motivation level. On the other hand, broadening the range of jobs did not affect the efforts put in by white-collar workers ($\beta = .00, t = .08, n.s.$). In short, enriching jobs in terms of responsibilities and development had positive effects on motivation.

Similar results were found in the analysis of blue-collar workers; these are reported in the right column of Table 1. The regression analysis found a significant F statistic ($F_{(11, 773)} = 17.35, p < .001$) with a moderately high coefficient of determination ($R^2 = .20$). This result indicated that the model was also applicable to blue-collar workers. All the demographic variables did not show

significant effects: male ($\beta = -.04, t = 1.14, n.s.$), tenure ($\beta = -.03, t = .83, n.s.$), and education ($\beta = .00, t = .03, n.s.$). It is difficult to conclude that personal characteristics led to differences in motivation levels.

Wage incentives persuaded blue-collar employees to work industriously: Both wage level ($\beta = .11, t = 3.34, p < .01$) and wage increase ($\beta = .09, t = 2.83, p < .01$) improved the motivation level. Fair promotion also acted as an incentive. Similar to the results for white-collar workers, the analysis of blue-collar workers also showed that promotion fairness had a significant effect ($\beta = .26, t = 7.76, p < .001$) and that promotion difficulty had a non-significant effect of promotion difficulty ($\beta = .06, t = 1.84, n.s.$).

The job characteristics affected the manner in which people worked at plants. Broadening the range of discretion ($\beta = .09, t = 2.37, p < .05$) and providing more opportunities for development ($\beta = .16, t = 4.42, p < .001$) raised the employees' motivation. On the other hand, increasing the range of responsibilities ($\beta = .01, t = .19, n.s.$) and the knowledge and abilities required ($\beta = .05, t = 1.47, n.s.$) did not change the effort put in by blue-collar workers.

Insert Table 1 about here.

Implications

This paper investigated the effectiveness of two incentive schemes—promotion and wage incentives. Which of the two incentives exerts a stronger influence on motivation? The results of this study found that both promotion and wages were important stimuli to encourage employees to work hard. A comparison of the relative sizes of the standardized regression coefficients (β) reveals that, as compared to wage level and wage increase, fair promotion had a greater effect on the motivation of Japanese white- and blue-collar workers. Therefore, the hypothesis of this study appears to be verified. The discussion first focuses on promotion as an incentive mechanism.

In general, career development in Japanese companies is based on seniority (e.g., Abegglen, 1957). The past HR policies certainly valued seniority standards, in particular, from the period of rapid economic growth in the 1960s till the peak of economic maturity in the 1980s. During this period, companies employed most of the college-graduate, white-collar employees in the managerial tracks (referred to as the generalist-oriented course of career) in which all managerial candidates competed with each other throughout their career to attain a few high-paid positions in the top management in the company. While scrutinizing the real promotion practices in Japanese companies, Imada and Hirata (1995) indicated that career development is a combination of three different systems of advancement.

In the first system—uniform promotion—there is no difference in the promotions offered to employees who joined the company in the same year. After a specific tenure in the company, the employees are uniformly and equally promoted to the next level (This system is considered to be applicable exclusively to male core employees). This is an ideal type of seniority promotion system because all employees are promoted solely on the basis of their tenure and experience in the company. However, it is impossible to periodically (e.g., annually) practice this uniform promotion system unless the company expands rapidly. Since a typical organization has a pyramid-shaped structure with a few top management and many rank-and-file employees, the practice of uniform promotion disrupts this structure. Therefore, it is indicated that the pure form of the seniority promotion system characterized by uniform advancement barely exists (Sato, Fujimura, and Yashiro, 2000).

The second system is that of career competition that allows variations in the speed of promotions. In this system, promotion inequality is not observed in the early career stages of workers who joined in the same year. The gaps in the speed of promotion become apparent in the later stages, in particular, with regard to the promotion of middle managers and at higher levels. The first-tier employees are quickly promoted to the first-line managers in the class, followed by the second- and third-tier contenders a few years after the first tier. The difference in promotion rates stimulates serious rivalry between employees in the same class. The employees work hard to avoid lagging behind the other members in the class. To maintain a high level of motivation among the contenders after the first round, companies provide an opportunity of a return match for losers so that the second- and third-tier contenders might win the first prize in the next round. With the progress in promotion competition, the winners and the losers in the class are becoming apparent. At a particular level of the hierarchy (typically at the middle-management level), most contenders identify the names of fast trackers and their past achievements. At the same time, there is a distinct career plateau phenomenon. Employees who are defeated in the career competition stagnate and do not get promoted further. In the speed contest, this phenomenon produces serious motivational problems among the defeated in the later stages of their career.

The third system is the tournament system in which only the winners of the lower rounds qualify for the higher rounds. No return match is allowed: Losers in the lower rounds have no chance for a comeback; therefore, they are unwilling to work diligently but instead lean on the company. Since this system cannot avoid producing losers in every round, it creates serious problems of stagnation and demotivation in the long race of the career marathon. Fortunately, this system is mainly applied to upper levels (the general-managers and higher levels); therefore, the damage to motivation is not very critical at the lower levels.

Japanese companies attach importance to the management of the class in which employees in the same cohort contend with each other for promotions. Interestingly, in Japan, younger

employees rarely advance faster and take over the senior members of the earlier classes. The “no-passing rule” appears to be applicable to the career track: The winning groups in the junior classes never succeed the winners in the senior classes. This makes the Japanese HR policies appear to be oriented toward seniority because the personnel promotion system is managed strictly on the basis of entry year.

Incentives that are given along with promotions are relatively larger than wage increases. The rivalry between employees lasts all throughout their company career from entry to retirement. Employees work hard not only because they want higher wages but also because they do not want to lose to their rivals. In addition, the potential of receiving wage incentives is decreased by the equalitarianism in the compensation system of Japanese organizations that allows low wage inequality (Ishida, 1985).

The results of this study show that fair promotion was a more powerful motivator than wage level and wage increase in terms of the relative sizes of beta coefficients. In addition, they also indicated that promotion difficulty did not decrease the motivation level. These findings suggest that employees adapted themselves to the changes in the HR systems without expecting to receive quick promotions but by judging fair promotion as the cause of hard work. Employees realize that the uniform promotion policy is dated, in particular, in the age of the long-lasting recession after the bursting of the economic bubble in the 1990s. They also believed that the new rule of the personnel promotion system should be based on individual merit rather than tenure. The finding that a fair promotion system was one of the few determinants of motivation in the current HR systems suggests that employees expect equity in decisions related to promotion as opposed to the standards of individual merit in order to maintain high motivation levels and career expectations.

Wage incentive is the other issue that needs to be discussed. In order to adapt to the changing business environment, organizations are currently flattening their structures. Short lines of command and flat layers in organizations are necessary to make prompt business decisions. Consequently, organizations keep the number of managerial positions to a minimum. In case of insufficient posts, Japanese companies have withdrawn wage increase from post promotion. In order to maintain the seniority-based promotion system and avoid a decrease in the motivation levels, companies modified their systems to raise the wages in accordance with skill development, rather than post promotion. Wages and promotion were not necessarily related to each other. Wage levels increased with the advancement of skill grades along with tenure. However, the enhancement of skill grades is not necessarily related to an upward movement in positions. Wage increase unaccompanied by post promotion was effective provided it aimed to temporarily maintain the seniority promotion system. However, the separation of posts and skill grades changed the system of personnel treatment to a large extent. When employees sensed that promotion would be difficult, they quit pursuing post promotion and changed their orientation to developing skills in

order to obtain higher wages.

This study reported that the relative wage level and the experience of wage increase had a significant effect on motivation. This finding indicated that monetary incentives were necessary to persuade employees to work hard. Monetary incentive could be particularly effective in the case of younger workers who attach more value to wages than to promotion. When promotion is difficult, it is necessary to establish new career tracks in which employees are encouraged to acquire professional knowledge and skills and completely utilize their expertise rather than pursue advancement in the organizational ladder. Since Japanese companies had assigned too much stress on the managerial career track, the treatment of experts was not deeply rooted in the earlier personnel promotion system. The new course of expert careers must clarify the linkage between individual expertise and the contribution made to companies.

Thus far, this paper has discussed monetary and positional incentives. It is believed that Japanese companies employ a long-term perspective in their personnel promotion policy. Companies are less likely to implement a short-term practice directly relating measurable outcomes and individual performance to annual promotion. Instead, they value skill acquisition as an important compensable factor although they previously used tenure in present positions as a substitute for skill development. One reason for adopting a long-term perspective is that Japanese managers considered it impossible to accurately measure individual outcomes. White-collar jobs in Japan are vague: They do not have clear job descriptions and job titles do not specify the required content, responsibilities, and knowledge, skills, and abilities (KSAs); they only express the ranks in the organizational layers. Moreover, employees perform jobs together as a team. Jobs are overlapped and connected to enhance team performance. Due to the unspecified scope of jobs and the nature of teamwork, it is difficult to identify the outcomes attributable to individuals. This is also true in the case of blue-collar jobs. Production operation is organized on a team basis; therefore, the final output cannot be attributed solely to a specific individual. Line managers consider it impossible to collect critical information to identify individual contribution. Consequently, wage incentive based on individual annual outcome is hardly implemented.

On the other hand, a long-term promotion incentive is rational if it is difficult to directly and accurately measure personal inputs such as job performance, ability, and effort levels. Companies collect personnel data (e.g., annual performance ratings, levels of skill development, work behavior, attendance, and prior job experience) every year, but do not use them for annual HR decisions. Instead, they pool this information for about ten years and utilize it to screen employees for higher positions. A theoretical rationale of the pooling of information is provided by the agency theory.

We observed three-layered agency relationships in organizations: the company, supervisors, and employees. The company as a principal hires supervisors (agents) for work and entrusts them

with the responsibility of monitoring employees' behaviors. The supervisors (principal) must then control employees' behaviors through close supervision in order to persuade employees (agents) to work for them as well as be loyal to the company. If supervisors are sufficiently conscientious to contribute to the company and are successful in monitoring and controlling the employees' behaviors, there would be no problems in this three-layered agency relationship. However, supervisors may engage in opportunistic behavior. They may misuse their authority and attempt to manipulate the subordinates to pursue their own interests. Bosses may use subordinates to take advantage of their rivals in the company, and in return, give them generous performance ratings and favorable opportunities. An agency problem occurs when supervisors favor their obedient subordinates in decisions related to promotion and wages, thereby reporting inaccurate information to the company. The moral hazard caused by supervisors may demotivate the motivation of most of employees other than their favorite subordinates. In order to get rid of such loss of morale due to nepotism and favoritism, companies do not take the risk of directly linking supervisor ratings to annual personnel decisions. Companies attempt to collect data of employee inputs and pool them as the background information for promotion rather than utilize the rationale for annual wage increases. In other words, the promotion decisions based on multi-year employee information are the last resort to prevent harmful effects on motivation due to opportunistic behaviors of the bosses.

It is acknowledged that the HR policies in Japanese companies have shifted from a seniority system to a merit system. Due to changes in values, most employees agree that companies should accurately measure individual differences and link them to provide appropriate wage increases and promotions. The traditional policies that treat all employees equal are dated. Currently, wage inequality and differential promotion are fair and just ways of treating individuals. Partiality and favoritism always exist in the treatment of personnel. In particular, in the age of isolationism where there is little communication between bosses and subordinates, damage due to unfair personnel treatment is serious as far as employees' motivation is concerned. The pooling of personnel information may work as a security against favoritism and foster fair treatment in the HR system.

Value of this Paper

This paper, which is based on the survey data collected from 1,823 workers of the Japanese automotive industry, showed that both promotion and wages influence employees' work motivation. Comparing the relative strengths of effects, this paper found that fair promotion was a more powerful motivator than wage level and wage increase.

Table1: Wage and Promotion Effects on Motivation Levels

Independent variables	white collar			blue collar		
	β	t	P	β	t	P
male	-.02	.69	.490	-.04	1.14	.253
tenure	.11	3.12	.002	-.03	.83	.407
education	.00	.09	.929	.00	.03	.975
wage level	.08	2.47	.014	.11	3.34	.001
wage increase	.07	2.34	.020	.09	2.83	.005
promotion difficulty	.04	1.39	.165	.06	1.84	.066
promotion fairness	.23	7.24	.000	.26	7.76	.000
job range	.00	.08	.939	.01	.19	.852
discretion	.17	4.95	.000	.09	2.37	.018
knowledge & ability	.09	2.71	.007	.05	1.47	.142
development opportunity	.23	7.61	.000	.16	4.42	.000
F		27.17			17.35	
$d.f.$		11; 886			11; 773	
P		.000			.000	
R^2		.25			.20	

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