Temporary Agency Workers' Human Resource Management and Willingness to Work

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In this paper, I conduct exploratory examinations on the factor of human resource management which has an impact on temporary agency workers' willingness to work. Based on the characteristics of temporary agency work's employment structure, I sort out human resource management functions by client firms and temporary agencies and statistically analyze the impact of these human resource management functions on willingness to work for client firms, willingness to work continuously for client firms and willingness to work continuously through temporary agencies. As a result of the analysis, it become apparent that (i) human resource managements of both client firms and temporary agencies have an impact on willingness to work, (ii) the impact of human resource management of client firms is different from that of temporary agencies' one depending on the type of willingness to work and type of human resource functions and (iii) for temporary agency workers, the human resource management of client firms has more impact on their satisfaction with the current way of working and the human resource management of temporary agencies has more impact on their future prospects. It indicates that in order to encourage their willingness to work and use them effectively, it is necessary to establish a mechanism of the human resource management on the basis of a long-term inter-organizational relationship between client firms and temporary agencies.

I. Introduction

The purpose of this paper is to conduct exploratory examinations on the way temporary agency workers' human resource management ought to be focusing on their willingness to work. The impact of human resource managements of firms using temporary agency workers (hereinafter referred to as client firms) and temporary agencies dispatching temporary agency workers (hereinafter referred to as temporary agencies) on their willingness to work is statistically analyzed using individual data.¹

The number of temporary agency workers in Japan in FY2007 was about 3.81 million and the majority of them are registered agency workers engaged in white-collar jobs such as clerical work (or office work). (Takahashi 2006a).² My focus in the following argument is the white-collar registered agency workers who are core of Japan's temporary agency work.

¹ "Temporary agency work" means hereinafter "registered agency work." Temporary agency workers are conceptually positioned as one of contingent workers. For details, see Polivka (1996).

² Time-series data on worker dispatching undertakings are compiled in detail by Takahashi (2006a). According to "Survey on Temporary Agency Workers" (2005) by Ministry of Health, Labour and Welfare, jobs of temporary agency workers (multiple answers) are: general office work (36.4%), office equipment operation (25.6%) and filing (14.3%) in descending order.

According to "Temporary Agency Workers Survey" (2005) conducted by the Ministry of Health, Labour and Welfare, the purpose of using temporary agency workers by client firms is mostly to "promptly secure human resources to fill a vacancy, etc." (74.0%) and "deal with temporary and seasonal variations of workloads" (50.1%). According to Atkinson's (1985) flexible firm model, it is the securing of numerical flexibility. However, even if client firms could secure the numerical flexibility by utilizing temporary agency workers, it doesn't necessarily mean that they are able to enhance temporary agency workers' productivity. It is because in order for temporary agency workers to be very productive, it is assumed that they work keeping their work motivation high. (Sato 2004; Imano and Sato 2002). Temporary agencies providing workers dispatching services to client firms are also very interested in the productivity of temporary agency workers and their willingness to work. It is an important issue for both client firms and temporary agencies to encourage willingness to work.

However, it is difficult to encourage willingness to work. This is because in the employment system of temporary agency work, client firms and temporary agencies are in charge of human resource management for temporary agency workers separately and their practicable human resource management functions (hereinafter referred to as human resource functions) are limited. Then, how do client firms and temporary agencies motivate workers with limited human resource functions? To consider this question, I will propose an analysis framework based on the structural characteristics of temporary agency work's employment system.

II. Analysis Framework

The characteristics of temporary agency work's employment system are in the triadic relations between client firms, temporary agencies and temporary agency workers. Workers such as regular employees and part-time workers have an employment relationship and a directions-and-orders relationship with one firm. In contrast, temporary agency workers have an employment relationship with temporary agencies but have a directions-and-orders relationship with temporary agencies but have a directions-and-orders relationship with temporary agencies but have a directions-and-orders relationship with client firms (or an actual relationship involving work assignment with client firms). This means that human resource functions which have assumed to be owned by one firm are separated by more than one management actor such as client firms and temporary agencies (Shimanuki and Morishima 2004).

Regarding human resource functions for temporary agency workers, overall, temporary agencies are responsible for deployment of temporary agency workers and client firms are supposed to use them. Those are categorized by major human resource functions; (i) procurement, (ii) training and (iii) evaluation/treatment as shown in Table 1.

(i) The procurement function: Client firms specify required human resources, design work contents assigned to temporary agency workers and set job requirements such as skills and experience necessary for job performance. Temporary agencies recruit candidates and

	Client firms' human resource management	Temporary agencies' human resource management
Overall human resources functions	Use of temporary agency workers (actual relationship involving work assignment)	Deployment (supply) of temporary agency workers (employment relationship)
(i) Procurement	Clarification of work contents and human resource requirements Clarification of work contents that temporary agency workers are assigned to Clarification of required skills and work experience for job performance	Recruit/Selection (job offer) Provision of information on jobs and workplaces of client firms Interview on desire for jobs and work experience
(ii) Training	OJT Explanation of expertise and know-how on jobs Explanation of rules at work and in-house regulations	Off-JT Provision of education and training opportunities required for skill development Provision of opportunities to design of and discussion on career plan
(iii) Evaluation/Treatmen	t Evaluation Clarification of criteria Feedback of evaluation results	Treatment Wage management Provision of employment opportunities
(iv) Others	Physical environment Improvement of work environment	Complaint handling Provision of opportunities to make complaints for work
	Information sharing Participation in meetings	Welfare Provision of opportunities for use of healthcare support and welfare facilities

Table 1. Separation of Human Resource Functions for Temporary Agency Work

select and register those who meet the requirements to respond to job offers by client firms.³

(ii) The training function: Client firms provide on-the-job training (OJT) to give temporary agency workers required knowledge and skills through actual job performance. Temporary agencies, on the other hand, offer off-the-job training (Off-JT) to get knowledge and skills which can be used in many client firms and also give workers opportunities to plan their long-term career.⁴

(iii) The evaluation/treatment function: Client firms are in charge of evaluation and temporary agencies are responsible for treatment. Client firms show the evaluation criteria to temporary agency workers, evaluate their work attitudes and job performances and give temporary agencies feedback on them. Temporary agencies manage workers' wages including decision of wage levels depending on the jobs in the client firms and a pay-raise in accordance with the development of their capabilities and performances, and also provide employment opportunities to them through other client firms' job offers.

Besides these three functions above, there are functions to be borne by client firms and temporary agencies. Unlike the separated functions such as procurement, training and evaluation/treatment, which should have been unified, those can be provided by either client firms or temporary agencies. For instance, only client firms can improve physical environment and promote information sharing and only temporary agencies can deal with complaint handling and welfare programs.

As above, temporary agency work has a structural characteristic that human resource

³ The job placement process by temporary agencies is normally called "job matching."

⁴ Opportunities for thinking future career are called "career design workshop" and companies have recently provided them as Off-the-Job Training (Off-JT).

functions are separated into client firms and temporary agencies unlike direct employment for regular employees. Based on this characteristic, I will statistically examine the impact of client firms' and temporary agencies' human resource management on the temporary agency workers' willingness to work using individual data of the workers in the following.

III. Data and Samples

Data used in this paper are from the results of "Survey on Temporary Agency Staff's Way of Working and Attitude" conducted by the Department of Research on the Staffing Industry, Institute of Social Science, the University of Tokyo in October 2005. This was a questionnaire survey conducted by Japan Staffing Services Association (JSSA) in cooperation with 11 temporary agencies. Respondents were (i) registered agency workers (except referral planned temporary agency workers), (ii) engaging in white-collar jobs such as general office work (including operation of office equipment and filing), sales office work, accounting work and trade office work and (iii) working for one client firm in the Tokyo metropolitan area for two months or longer.⁵

The questionnaires were distributed to temporary agency workers via temporary agencies in which they are registered and were sent back to the University of Tokyo by mail. 2,253 questionnaires were distributed and 953 were collected (collection rate: 42.3%). Those samples were limited by sex (female) and jobs (general office work, sales office work, accounting work, trade office work and finance office work) and the number of them was reduced by 863. Samples are as follows. Sex: Female only; average age: 32.7 years old; family structure: with spouse 26.0%, with a child (children) 5.9%, with other relatives living together 49.0%; person responsible for household budget: 35.3%; academic background: undergraduate/graduate school graduates 33.5%, technical/junior college graduates 33.5% (totaling a little less than 70%) and business: general office work 67.8%, sales office work 15.2% (totaling 80%), accounting work, trade office work and finance office work are all less than 10%. As for working days a week, five days account for 96.5%. Regarding working hours a day, seven hours or longer account for 95.3%. It can be said that the majority of them are working fulltime, five days a week. Concerning the respondents' career, 88.0% of them have a working experience as regular employees. The average number of client firms they worked for is 2.95. The average working years in the current client firms is 2.14 years. On the other hand, the average number of temporary agencies they worked for is 1.66.

Next, focusing on attributes on the current client firms, the most common industry is manufacturing (29.0%). Combined with finance/insurance (13.8%), wholesale/retail (13.6%) and information-communication (13.0%), they account for a little less than 70%.

⁵ Analysis data contain 1.7% of samples in which the working period in the current client firms is less than two months.

Willingness to work	Items	Rate of "yes" (%)
Work motivation	Are you trying to forge ahead with work?	93.8
	 Are you trying to work effectively? 	83.4
	· Are you trying to live up to supervisor's and coworkers' expectations?	55.1
	Are you trying to contribute to the client firm and the workplace?	48.4
Commitment to client firms	 Would you like to renew the contract with the current client firm? 	47.1
	 Would you like to work for other client firms?(R) 	33.9
Commitment to temporary agencies	· Would you like to continue jobs offered by the current temporary agency?	42.2
	Would you like to accept jobs offered by other temporary agencies?(R)	21.6

Table 2. Temorary Agency Workers' Willingness to Work

Note: (R) indicares reverse item.

As for company size, 52.9% of them are working for major companies with more than 1,000 employees. Finally, looking at attributes of the current temporary agencies, capital patterns are: independent companies 72.1% and capital companies 27.9%. Regarding company size, major companies with annual sales of over 50 billion yen in FY2004: 66.4% and small- to medium-sized companies: 33.6%.⁶

IV. Setup of Variables

1. Dependent Variable

The dependent variable is temporary agency workers' willingness to work. This paper set three types of willingness to work which are considered to be important from both viewpoints of client firms and temporary agencies as shown in Table 2.

The first one is willingness to work for client firms (hereinafter referred as to "work motivation"). Client firms expect temporary agency workers to work effectively, contribute to client firms and be very productive with high work motivation.⁷ Since very productive temporary agency workers reflect credit on their temporary agencies, the temporary agencies are also interested in their willingness to work. Therefore, their work motivation, I used a sum of four items, "Are you trying to forge ahead with work?" (93.8%), "Are you trying to work effectively?" (83.4%), "Are you trying to live up to supervisor's and coworkers' expectations?" (55.1%) and "Are you trying to contribute to the client firm and the work-

⁶ Temporary agencies are divided into two types, "independent" and "capital" by capital pattern. "Independent" means the temporary agencies without a parent company or with a parent company whose core business is human resource business. On the other hand, "capital" means temporary agencies with a parent company whose core business is not human resource business such as manufacturing or finance. For relationship between capital patterns of temporary agencies and temporary agency workers' way of working/attitude, see Takahashi (2006b).

⁷ This paper looks at work motivation widely, and supposes that not only willingness to efficiently perform jobs but also willingness to live up to employees of client firms and contribute to the work-places lead to high production. For work motivation, see Pinder (1998).

place?" (48.4%) (Yes = 1 and No = 0. The percentage in parenthesis is the rate of "Yes".). The average of work motivation is 2.807 (standard deviation = 1.022).

The second one is willingness to work continuously for client firms (hereinafter referred as to "commitment to client firms"). Client firms would like to renew the contract repeatedly with very productive temporary agency workers for a long time. For client firms, workers' willingness to work continuously for them without transfer to other companies may have next importance to their willingness to work on a short term basis. Workers' commitment to client firms is more important for client firms. To calculate commitment to client firms, I used a sum of two items, "would you like to renew the contract with the current client firm?" (47.1%) and "would you like to work for other client firms? (R)" (33.9%) (Yes = 1 and No = 0. "R" indicates reverse item.). The average score of commitment to client firms is 1.132 (standard deviation = 0.803).

The third one is willingness to continuously accept jobs offered by the same temporary agencies (hereinafter referred as to "commitment to temporary agencies"). Temporary agencies would try to reduce costs for recruitment and selection of workers and collect Off-JT costs by continuously using their registered workers. Accordingly, the temporary agencies may place the higher priority on that temporary agency workers work continuously and exclusively through them without accepting other temporary agencies' job offers (even if the workers change the companies to work for) over that the workers work continuously for particular client firms. Thus, workers' commitment to temporary agencies is more important for the temporary agencies. To calculate commitment to temporary agencies, I used a sum of two items, "Would you like to continue jobs offered by the current temporary agencies?" (42.2%) and "Would you like to accept jobs offered by other temporary agencies? (R)" (21.6%) (Yes = 1 and No = 0. R indicates reverse item.). The average score of commitment to temporary agencies is 1.206 (standard deviation = 0.696).

2. Independent Variables

The independent variables are variables on client firms' and temporary agencies' human resource managements. Based on the separation of human resource functions of temporary agency work shown in Table 1, I set variables on client firms' and temporary agencies' human resource managements as shown in Table 3.

As client firms' human resource management variables, I set four human resource functions, (i) procurement, (ii) training, (iii) evaluation/treatment and (iv) others, with two variables each, i.e., eight variables in total: (i) Procurement function: Taking up "Clarification of work contents and required human resources for temporary agency workers," I use two variables, namely, "clarification of work contents" (the rate of "Yes": 47.7%) and "clarification of required human resources" (18.1%).⁸ (ii) Training function: Focusing on

⁸ It appears that whether or not work contents of client firms would match with temporary agency workers' skills and experience depends on matching effort of temporary agencies as well as clarification of required human resources.

Human resource functions	Variables	Human resources	Rate of "yes" (%)
i) Procurement			<u>j</u> 22 (72)
<u>Client firms</u> Work contents and human resources	Clarification of work contents	Work contents for temporary agency workers are distinguished from ones for regular employees and temporary aggency workers are not assigned the jobs which are not in the contract	47.7
Clarification of requirements	Clarification of required human resources	Skills and work experience can be used for the job	18.1
<u>Temporary agencies</u> Recruitment/selection	Provision of information on client firms	Information on jobs and workplaces of client firms are sufficiently provided.	47.2
	Interview on desire and experience	When offering jobs, temporary agency workers' desire and past work experience are asked.	75.3
i) Training			
<u>Client firms</u> OJT	Explanation of business knowledge and know-how	Business knowledge and know-how required for the job are explained.	60.0
	Explanation of workplace rules	Workplace rules and in-house regulations of the client firm are explained.	58.0
<u>Temporary agencies</u> Off-JT	Opportunities for education/ training	Training required for developing skills is provided.	87.4
	Opportunities for career counseling	Opportunities for discussion on career and counseling are provided.	39.8
iii) Evaluation/treatment Client firms			
Evaluation	Clarification of evaluation criteria	The evaluation criteria are clarified.	69.6
	Feedback of evaluation results	Evaluation for work behavior and improvement are explained.	46.7
<u>Temporary agencies</u> Treatment	Wage management	Hourly wage level of the current job is high or hourly wage has increased during the period of working for the current client firm.	66.3
	Provision of employment opportunities	Opportunities for next job offer have been provided.	48.2
iv) Others			
<u>Client firms</u> Physical environment	Improvement of work environment	There is no work environment difference between regular employees and temporary agency workers such as locker rooms.	68.5
Information sharing	Information sharing	Participating business meetings in the client form or having lunch with employees.	84.5
<u>Temporary agencies</u> Complaint handling	Complaint handling	The temporary agency staff regularly visit workplaces of the client firm.	43.7
Welfare	Welfare	There are good opportunities for using healthcare support and welfare facilities.	62.1

Table 3. Human Resource Managements of Client Firms and Temporary Agencies

situation of OJT implementation, I use two variables, "explanation of business knowledge and know-how" (60.0%) and "explanation of workplace rules" (58.0%). (iii) Evaluation/treatment: As for situation of evaluation process implementation, two variables are used "clarification of criteria" (69.6%) and "feedback of evaluation results" (46.7%). (iv) Other functions: "Improvement of working environment" (68.5%) and "information sharing" (84.5%) are set as variable.

These human resource management variables are all dummy variables (Yes = 1 and No = 0), and whether or not human resource management is implemented is based on the recognition of the temporary agency workers who answered the questions. The average of total 8 variables was 4.530 (standard deviation = 1.544).

In the same way as with that of client firms, for temporary agencies' human resource management variables, I set four human resource functions with two variables each, i.e., eight variables in total: (i) Procurement function: As for recruitment/selection of temporary agency workers, two variables used are "provision of client firms' information" $(47.2\%)^9$ and "interview on desire for jobs and work experience of temporary agency workers" (75.3%). (ii) Training function: Concerning situation of Off-JT implementation, two variables are "education/training" (87.4%) and "career counseling" (39.8%). (iii) Evaluation/treatment function: For situation of treatment implementation, two variables are "wage management" (66.3%)¹⁰ and "provision of employment opportunities" (48.2%).¹¹ (iv) Other functions: "Compliant handling" (43.7%)¹² and "welfare programs" (62.1%). The average of total 8 variables was 4.733 (standard deviation = 1.541).

⁹ For "provision of information on client firms," seven answers to the question, "Did the current temporary agency provide the following information before working for the current client firm?" are (i) work contents, (ii) working conditions (contract period, hourly wage, working hours, workplace, etc.), (iii) business contents of the client firm, (iv) office environment of the client firm, (v) required skills for working in the client firm, (vi) employees in the client firm (number of employees, sex ratio, etc.) and (vii) temporary agency workers in the client firm (number of temporary agency workers, sex ratio, etc.). Scores were given when the answer is: Yes = 1 and No = 0 and then, all scores were added. The variables were given when the total is average (5.165) or higher = 1, less than average = 0.

¹⁰ For "high hourly wage level," average hourly wage was calculated by job and variables were given when the wage is average of the job or higher =1, less than average = 0. Average hourly wages of these data are: general office work: JPY1,581, accounting work: JPY1,584, sales office work: JPY1,617, trading office work: JPY1,718 and finance office work: JPY1,529.

¹¹ For "provision of employment opportunities", variables were given when the answer to the question, "Have you accept job(s) from the current temporary agency before?" is Yes = 1 and No = 0.

¹² For "complaint handling", the answers to the question "how often does the person of the current temporary agency who is responsible for your employment visit your workplace?" were (1) once a week or more (0.7%), (2) once a fortnight (4.2%), (3) once a month (38.8%), (4) once per two or three months (46.3%), (5) once per six months (4.9%), (6) less than once per six months (2.2%) and (7) never (2.9%). Variables were given when once a month or more (43.7%) = 1, less than once a month = 0.

3. Control Variables

As control variables, I set them on temporary agency workers' individual characteristics, client firms' company characteristics and temporary agencies' company characteristics.

Variables for temporary agency workers' individual characteristics are: age, academic background dummy (on the basis of junior high school/high school graduates, career college, junior college, technical college, under graduate school and graduate school graduates = 1, others = 0), spouse/children/other relatives living together dummy (with any = 1, none =0), person responsible for household budget dummy (myself = 1, others =0), period of working as temporary agency workers (months), the number of client firms and temporary agencies that temporary agency worker worked for or with in the past, period of working for the current client firm (months), year of being registered in the current temporary agency and period of being registered in the current temporary agency. In terms of work contents and labor conditions of temporary agency workers, they are job dummy (on the basis of general office work, sales office work, accounting work, trading office work and finance office work = 1, others = 0), scheduled working days a week, scheduled working hours a day (minutes) and monthly average of overtime hours. I also set autonomous/subsidiary/humdrum job dummy (yes = 1, no = 0)¹³ for job characteristics, and job selection orientation/work-life balance orientation/skill exercising orientation dummv¹⁴ and regular employee orientation dummy¹⁵ (yes = 1, no = 0) for temporary agency workers' labor orientation and career orientation.

As variables for client firms' company characteristics, they are company size dummy (on the basis of less than 100 employees, 100 to 499 employees, 200 to 499 employees, 500 to 999 employees, 1000 or more employees = 1, others = 0) and industry dummy (manufacturing, information-communication, wholesale/retail and finance/insurance industries = 1, others = 0), and for temporary agencies' company characteristics they are company size

¹³ Variables of job characteristics are calculated by using the following items: Autonomous job dummy is "how to work can be decided by myself," subsidiary job dummy is "subsidiary job" and humdrum job dummy is "humdrum and repetitive work" and variables were given when the answer is Yes = 1, No = 0.

¹⁴ For temporary agency workers' working orientation, the following answers to the question "why are you working as a temporary agency worker?" were used as variables: job selection orientation dummy is "work contents and companies can be selected" or "working hours and workplaces can be selected," work-life balance orientation dummy is "easy to balance with housework, child-rearing and nursing" or "easy to balance with hobbies or studies", skill exercising orientation dummy is "skills or certificates can be utilized" or "skills can be improved". Variables were given when either one is correct = 1, neither is correct = 0.

¹⁵ For regular employee orientation dummy, variables were given when the answers to the question "Do you want to work as a regular employee in the future?" were "I want to work as a regular employee" (53.4%) = 1 and "I don't work as a regular employee" (23.2%) and "I don't know" (23.4%) = 0. The breakdown of "I want to work as a regular employee" is "I want to work as a regular employee for the current client firm" (11.2%), "I want to work as a regular employee for a company other than the current client firm" (17.7%) and "I want to work as a regular employee for any company" (24.5%).

dummy (major = 1, medium or smaller = 0) and capital pattern (independent = 1, capital = 0). Basic statistics of variables used for this analysis are shown in Appendix Table.

V. Analysis with All Samples

I conducted a multiple regression analysis using all samples with temporary agency workers' willingness to work as a dependent variable, human resource managements of client firms and temporary agencies as independent variables and individual characteristics and client firms' and temporary agencies' company characteristics as control variables.¹⁶ I applied human resource management variables of (i) entire human resource functions, (ii) procurement function, (iii) training function, (iv) evaluation/treatment function and (v) other functions to three variables: work motivation, commitment to client firms and commitment to temporary agencies.

The analysis result on the workers' work motivation is shown in Table 4. As entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on their work motivation. Focusing attention on the result of individual functions such as procurement, training and evaluation/treatment, "clarification of required human resources" and "provision of client firms' information" in the procurement function, "explanation of business knowledge/know-how" and "education/training" in the training function and "clarification of evaluation criteria" and "wage management" in the evaluation/treatment function have a positive impact. As same as entire human resource functions, in the individual functions such as procurement, training and evaluation/treatment, both client firms' and temporary agencies' human resource managements have a significant positive impact on workers' work motivation.

The analysis result on the workers' commitment to client firms is shown in Table 5. As entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on their commitment to client firms. However, compared with work motivation, client firms' human resource management has a greater impact on workers' commitment to client firms.¹⁷ Looking at the result of individual functions, in the procurement function, client firms' "clarification of work contents" and "clarification of required human resources" and the temporary agencies' "provision of client firms' information" and "interview on desire and experience" have a positive impact on their commitment to client firms. On the other hand, in the functions other than procurement, only client firms' human resource management has a positive impact on the workers' commitment to client firms. In particular, "explanation of business knowledge/know-how" and

¹⁶ Although the percentage of the missing value of data used for this analysis is only 1.2%, sample size without missing value is only 622 (72.1%). Due to such limited data, the missing value is replaced with the average value in order to secure a certain sample size.

¹⁷ The description of comparing the impacts of client firms' and temporary agencies' human resource managements are based on the comparison by the standardized coefficient.

Constant Age Career college graduates (on the basis of junior high school/high school graduates) Technical and junior college graduates Undergraduate and graduate school graduates With spouse (Yes = 1) With child(ren (Yes = 1) With relative(s) living together (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	Coefficient -29.902 0.016 -0.147 0.082 0.001 0.259 * 0.016 0.256 ** 0.114 0.100 -0.052 0.106 -0.040 0.229 *** 0.146 ** -0.038	Standard error 35.757 0.009 0.120 0.104 0.106 0.134 0.158 0.114 0.107 0.102 0.137 0.155 0.195 0.073
Age Career college graduates (on the basis of junior high school/high school graduates) Technical and junior college graduates Undergraduate and graduate school graduates With spouse (Yes = 1) With child(ren) (Yes = 1) With relative(s) living together (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	$\begin{array}{c} 0.016\\ -0.147\\ 0.082\\ 0.001\\ 0.259*\\ 0.016\\ 0.256**\\ 0.114\\ \hline 0.100\\ -0.052\\ 0.106\\ -0.040\\ 0.229***\\ 0.146**\\ \end{array}$	35.757 0.009 0.120 0.104 0.106 0.134 0.158 0.114 0.107 0.102 0.137 0.155 0.195
Age Career college graduates (on the basis of junior high school/high school graduates) Technical and junior college graduates Undergraduate and graduate school graduates With spouse (Yes = 1) With child(ren) (Yes = 1) With relative(s) living together (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	$\begin{array}{c} 0.016\\ -0.147\\ 0.082\\ 0.001\\ 0.259*\\ 0.016\\ 0.256**\\ 0.114\\ \hline 0.100\\ -0.052\\ 0.106\\ -0.040\\ 0.229***\\ 0.146**\\ \end{array}$	0.009 0.120 0.104 0.106 0.134 0.158 0.114 0.107 0.102 0.137 0.155 0.195
Career college graduates (on the basis of junior high school/high school graduates) Technical and junior college graduates Undergraduate and graduate school graduates With spouse (Yes = 1) With child(ren) (Yes = 1) With relative(s) living together (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working period as temporary agency worker (months) Number of client firms worked	-0.147 0.082 0.001 0.259 * 0.016 0.256 ** 0.114 0.100 -0.052 0.106 -0.040 0.229 *** 0.146 **	0.120 0.104 0.106 0.134 0.158 0.114 0.107 0.102 0.137 0.155 0.195
Technical and junior college graduates Undergraduate and graduate school graduates With spouse (Yes = 1) With child(ren) (Yes = 1) With relative(s) living together (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Attonomous job Subsidiary job Humdrum job Working days a week Working period as temporary agency worker (months) Number of client firms worked	$\begin{array}{c} 0.082\\ 0.001\\ 0.259*\\ 0.016\\ 0.256**\\ 0.114\\ \hline 0.100\\ -0.052\\ 0.106\\ -0.040\\ 0.229***\\ 0.146**\\ \end{array}$	0.104 0.106 0.134 0.158 0.114 0.107 0.102 0.137 0.155 0.195
Undergraduate and graduate school graduates With spouse (Yes = 1) With child(ren) (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working period as temporary agency worker (months) Number of client firms worked	$\begin{array}{c} 0.001\\ 0.259*\\ 0.016\\ 0.256**\\ 0.114\\ \hline 0.100\\ -0.052\\ 0.106\\ -0.040\\ 0.229***\\ 0.146**\\ \end{array}$	0.134 0.158 0.114 0.107 0.102 0.137 0.155 0.195
With child(ren) (Yes = 1) With relative(s) living together (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Trading office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.016 0.256 ** 0.114 0.100 -0.052 0.106 -0.040 0.229 *** 0.146 **	0.158 0.114 0.107 0.102 0.137 0.155 0.195
With relative(s) living together (Yes = 1) Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.256 ** 0.114 0.100 -0.052 0.106 -0.040 0.229 *** 0.146 **	0.114 0.107 0.102 0.137 0.155 0.195
Person responsible for household budget (Myself = 1, Others = 0) Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.114 0.100 -0.052 0.106 -0.040 0.229 *** 0.146 **	0.107 0.102 0.137 0.155 0.195
Sales office work (on the basis of general office work) Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.100 -0.052 0.106 -0.040 0.229 *** 0.146 **	0.102 0.137 0.155 0.195
Accounting work Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	-0.052 0.106 -0.040 0.229 *** 0.146 **	0.137 0.155 0.195
Trading office work Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.106 -0.040 0.229 *** 0.146 **	0.155 0.195
Finance office work Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	-0.040 0.229 *** 0.146 **	0.195
Autonomous job Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.229 *** 0.146 **	
Subsidiary job Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.146 **	0.072
Humdrum job Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked		
Working days a week Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	-0.038	0.073
Working minutes a day Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked		0.072
Monthly overtime hours Working period as temporary agency worker (months) Number of client firms worked	0.010	0.097
Working period as temporary agency worker (months) Number of client firms worked	-0.002 *	0.001
Number of client firms worked	0.003	0.004
	0.000	0.002
	-0.017	0.020
Working period in the current temporary agency (months)	0.003 *	0.002
Number of temporary agencies employed	0.048	0.043
Registered year in the current temporary agency	0.016	0.018
work experience as a regular employee (Yes = 1)	-0.020	0.112
Job selection orientation	-0.078	0.085
work-life barance orientation	-0.080 0.026	0.076 0.084
skill exercising orientation Regular employee orientation	0.026	0.084
Client firm 100 employees or more (on the basis of less than 100 employees)	0.184	0.072
300 employees of more	0.132	0.120
1,000 employees or more	0.205 *	0.140
Manufacturing	0.025	0.095
Information and telecommunication	-0.049	0.117
Wholesale and retail	-0.089	0.119
Finance and insurance	-0.004	0.130
Temporary agency Company size (major = 1, medium or smaller = 0)	0.267 *	0.150
Capital pattern (independent = 1, capital = 0)	-0.242	0.162
Overall human Client firm	0.085 ***	0.023
resource functions Temporary agency	0.063 ***	0.025
Procurement Client firm Clarification of work contents	0.005	0.025
Clarification of required human resources		
Temporary agency Provision of information on client firms		
Interview on desire and experience		
Training Client firm Explanation of business knowledge and know-how		
Explanation of workplace rules		
Temporary agency Opportunities for education/training		
Opportunities for career counseling		
Evaluation/ Client firm Clarification of evaluation criteria		
treatment Feedback of evaluation results		
Temporary agency Wage management		
Provision of employment opportunities		
Others Client firm Improvement of work environment		
Information sharing		
Temporary agency Complaint handling		
temporary agency complaint handning		
Welfare	2 400 dubut	
Welfare Value F	2.499 ***	
Welfare Value F R2	2.499 *** 0.106	

Table 4. The Impact of Client Firms' and Temporary Agencies'
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Note: N=863. ***: p<0.01, **: 0.01<p<0.05, *: 0.05<p<0.1.

Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
-32.240	35.974	-20.162	36.102	9.519	37.309	-9.877	36.106
0.016 *	0.009	0.016 *	0.009	0.014	0.009	0.016 *	0.009
-0.137	0.121	-0.130	0.121	-0.115	0.122	-0.120	0.122
0.076	0.104	0.051	0.105	0.033	0.105	0.042	0.105
-0.001	0.107	-0.007	0.107	-0.023	0.108	0.008	0.108
0.252 *	0.136	0.262 *	0.136	0.283 **	0.137	0.260 *	0.137
0.024	0.158	0.067	0.160	0.033	0.160	0.050	0.160
0.261 **	0.115	0.286 **	0.115	0.289 **	0.115	0.273 **	0.116
0.117	0.108	0.093	0.108	0.087	0.108	0.080	0.109
0.081	0.103	0.037	0.103	0.084	0.104	0.034	0.104
-0.072	0.138	-0.080	0.139	-0.080	0.139	-0.077	0.140
0.033	0.158	0.115	0.157	0.129	0.158	0.088	0.158
-0.011	0.196	0.102	0.197	0.090	0.198	0.106	0.200
0.243 ***	0.073	0.290 ***	0.073	0.277 ***	0.073	0.275 ***	0.074
0.146 **	0.074	0.134 *	0.074	0.139 *	0.074	0.130 *	0.074
-0.053	0.072	-0.080	0.073	-0.068	0.073	-0.073	0.073
0.001	0.098	-0.126	0.099	-0.121	0.099	-0.108	0.099
-0.002 *	0.001	-0.002	0.001	-0.001	0.001	-0.001	0.001
0.002	0.004	0.002	0.004	0.001	0.004	0.002	0.004
-0.001	0.002	0.000	0.002	-0.001	0.002	-0.001	0.002
-0.009	0.020	-0.007	0.020	-0.007	0.021	-0.011	0.021
0.004 **	0.002	0.003	0.002	0.002	0.002	0.003	0.002
0.041	0.044	0.046	0.043	0.059	0.043	0.052	0.044
0.017	0.018	0.011	0.018	-0.003	0.019	0.006	0.018
-0.013	0.113	-0.144	0.113	-0.180	0.114	-0.151	0.114
-0.052	0.086	-0.026	0.086	-0.024	0.086	-0.014	0.086
-0.077	0.076	-0.075	0.077	-0.107	0.077	-0.104	0.077
0.037 0.162 **	0.085	0.054	0.085	0.064	0.085	0.051 0.156 **	0.085
0.102	0.073	0.153 **	0.073	0.159 **	0.074	0.26.0	0.074
0.122	0.127	0.250	0.127	0.201	0.128	0.211	0.128
0.070	0.148	0.106 0.292 **	0.148	0.094	0.148	0.094	0.149
0.182	0.118	0.272	0.118	0.215	0.118	0.201	0.118
0.032	0.096	0.123	0.096	0.106	0.096	0.084	0.097
-0.026	0.118	-0.006	0.118	0.009	0.119	0.000	0.119
-0.117	0.120	-0.032	0.121	-0.053	0.121	-0.054	0.121
-0.013	0.131	0.011	0.131	0.032	0.132	0.019	0.133
0.242	0.153	-0.072	0.153	-0.108	0.155	-0.059	0.155
-0.177	0.163	0.032	0.164	0.147	0.164	0.074	0.165
-0.050 0.290 ***	0.072						
0.220	0.093						
0.183 *	0.073						
0.008	0.085	0.115 *	0.075				
		0.116 *	0.075				
		0.085	0.076				
		0.341 ***	0.112				
		0.032	0.078	0.445	0.6		
				0.118 *	0.078		
				0.076	0.072		
				0.190 ** -0.085	0.082 0.079		
				0.000	0.077	0.106 *	0.078
						0.056	0.100
						0.036	0.073
2.189 ***		2.220 ***		2.075 ***			0.075

Human Resource Managements on the Work Motivation

			Coefficient	Standard
Constant			0.051	error 26.811
Age			0.004	0.007
	utes (on the basis of jun	ior high school/high school graduates)	-0.043	0.007
Technical and junior		for high school high school graduates)	0.154 **	0.078
	graduate school graduate	8	0.068	0.080
With spouse (Yes =			0.224 **	0.101
With child(ren) (Yes			0.062	0.118
	ng together (Yes $= 1$)		0.184 **	0.085
Person responsible f	or household budget (M	yself = 1, Others = 0)	0.103	0.080
Sales office work (o	n the basis of general of	fice work)	-0.009	0.076
Accounting work			0.062	0.103
Trading office work			0.095	0.117
Finance office work			-0.137	0.146
Autonomous job			0.220 ***	0.054
Subsidiary job			0.051	0.055
Humdrum job	,		-0.130 **	0.054
Working days a wee			-0.104	0.073
Working minutes a Monthly overtime h			0.000 -0.004	0.001 0.003
	ours emporary agency worker	r (months)	0.004	0.003
Number of client fir		(monuis)	-0.026 *	0.001
	he current temporary age	ency (months)	0.001	0.013
	ry agencies employed	incy (montins)	-0.028	0.001
	ne current temporary age	ncv	0.000	0.013
	a regular employee (Yes		-0.033	0.015
Job selection orienta			-0.052	0.064
work-life barance or			0.002	0.057
skill exercising orier	ntation		0.002	0.063
Regular employee o			-0.190 ***	0.054
Client firm	100 employees or mo	re (on the basis of less than 100 employees)	-0.149	0.094
	300 employees or mo	re	-0.138	0.110
	1,000 employees or n	nore	-0.074	0.087
	Manufacturing		-0.051	0.071
	Information and telec	ommunication	-0.026	0.088
	Wholesale and retail		-0.087	0.089
	Finance and insurance		-0.015	0.097
Temporary agency		= 1, medium or smaller $= 0$)	0.080	0.114
		endent = 1, capital = 0)	-0.263 **	0.121
Overall human	Client firm		0.129 ***	0.018
resource functions	Temporary agency		0.027 *	0.019
Procurement	Client firm	Clarification of work contents		
		Clarification of required		
	TT.	human resources		
	Temporary agency	Provision of information on client firms		
T	Client firm	Interview on desire and experience Explanation of business knowledge and know-how		
Training	Chent him	Explanation of business knowledge and know-now Explanation of workplace rules		
	Temporary agency	Opportunities for education/training		
	remporary agency	Opportunities for career counseling		
Evaluation/	Client firm	Clarification of evaluation criteria		
treatment	Chefit IIIII	Feedback of evaluation results	1	
a cathlent	Temporary agency	Wage management	1	
	remporary agency	Provision of employment opportunities	1	
Others	Client firm	Improvement of work environment		
Guidio	Chent IIIII	Information sharing	1	
	Temporary agency	Complaint handling	1	
	portary agoney	Welfare	1	
Value F			4.710 ***	
value F				

Note: N=863. ***: p<0.01, **: 0.01<p<0.05, *: 0.05<p<0.1.

Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
-1.764	27.302	-2.456	27.481	1.162	28.145	-2.111	27.428
0.003	0.007	0.003	0.007	0.002	0.007	0.004	0.007
-0.069	0.092	-0.055	0.092	-0.066	0.092	-0.059	0.093
0.124	0.079	0.141 *	0.080	0.127	0.079	0.139 *	0.080
0.045	0.081	0.061	0.082	0.048	0.081	0.066	0.082
0.207 **	0.103	0.209 **	0.103	0.203 **	0.103	0.202 *	0.104
0.118	0.120	0.082	0.122	0.101	0.121	0.108	0.121
0.170 *	0.087	0.183 **	0.088	0.183 **	0.087	0.174 **	0.088
0.105	0.082	0.097	0.082	0.078	0.082	0.092	0.083
0.009	0.078	-0.031	0.078	0.006	0.078	-0.028	0.079
0.068	0.105	0.062	0.106	0.046	0.105	0.048	0.106
0.074	0.120	0.111	0.120	0.119	0.119	0.105	0.120
-0.070	0.149	-0.103	0.150	-0.066	0.150	-0.100	0.152
0.251 ***	0.055	0.269 ***	0.055	0.250 ***	0.055	0.259 ***	0.056
0.035	0.056	0.047	0.056	0.047	0.056	0.037	0.057
-0.177 ***	0.055	-0.156 ***	0.056	-0.157 ***	0.055	-0.160 ***	0.056
-0.109	0.075	-0.120	0.075	-0.116	0.075	-0.114	0.075
0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
-0.004	0.003	-0.005 *	0.003	-0.004	0.003	-0.005 *	0.003
0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
-0.024	0.016	-0.020	0.016	-0.027 *	0.016	-0.022	0.016
0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
-0.021	0.033	-0.025	0.033	-0.016	0.033	-0.021	0.033
0.002	0.014	0.002	0.014	0.000	0.014	0.002	0.014
-0.042	0.086	-0.038	0.086	-0.045	0.086	-0.036	0.086
-0.058	0.066	-0.025	0.065	-0.018	0.065	-0.029	0.066
-0.002	0.058	0.022	0.058	0.003	0.058	-0.001	0.059
0.011	0.056	0.022	0.065	0.037	0.064	0.027	0.065
-0.185 ***	0.055	-0.186 ***	0.055	-0.188 ***	0.055	-0.187 ***	0.056
-0.150	0.095	-0.159	0.097	-0.156	0.095	-0.164 *	0.097
-0.133	0.090	-0.174	0.113	-0.148	0.090	-0.171	0.113
-0.088	0.089	-0.097	0.090	-0.097	0.089	-0.101	0.090
-0.038	0.073	-0.039	0.073	-0.037	0.073	-0.058	0.090
-0.028	0.073	-0.039	0.073	-0.037	0.075	-0.038	0.074
-0.025	0.089	-0.128	0.090	-0.025	0.089	-0.011	0.091
-0.034	0.099	-0.065	0.100	-0.047	0.099	-0.026	0.101
0.043	0.116	0.092	0.117	0.066	0.117	0.094	0.117
-0.218 *	0.123	-0.270 **	0.125	-0.241 *	0.124	-0.283 **	0.126
0.172 ***	0.054						
0.233 ***	0.071						
0.075 *	0.055						
0.140 **	0.065						
0.110	0.005	0.107 **	0.057				
		0.162 ***	0.057				
		0.102	0.038				
		-0.073	0.085				
				0.255 *** 0.107 **	0.059 0.054		
				0.050	0.062		
				0.053	0.060	0.101 *	0.059
						0.155 **	0.076
						0.063	0.055
						0.037	0.057
		3.318 ***		3.588 ***		3.102 ***	
3.604 ***		3.318 ****		5.300		5.102	

Resource Managements on the Commitment to Client Firm

			G	Standard
			Coefficient	error
Constant			15.407	24.178
Age			0.008	0.006
Career college gradu	ates (on the basis of junic	or high school/high school graduates)	-0.090	0.081
Technical and junior			-0.006	0.070
	raduate school graduates		-0.100	0.072
With spouse (Yes $=$ 1			-0.086	0.091
With child(ren) (Yes			0.057	0.107
With relative(s) livin		16 1 01 0	0.008	0.077
	or household budget (Mys		-0.061	0.072
	the basis of general offic	ce work)	-0.064	0.069
Accounting work			0.100 0.037	0.093
Trading office work Finance office work			-0.082	0.105 0.132
Autonomous job			-0.082	0.132
Subsidiary job			-0.063	0.049
Humdrum job			0.005	0.030
Working days a weel	r		-0.070	0.049
Working minutes a d			0.000	0.001
Monthly overtime ho			-0.003	0.001
	mporary agency worker ((months)	0.001	0.001
Number of client firm		(nonuis)	-0.001	0.014
	e current temporary agen	cy (months)	-0.002 *	0.001
Number of temporary			-0.032	0.029
	e current temporary agen	ev	-0.007	0.012
	regular employee (Yes =		-0.123	0.076
Job selection orientat			0.059	0.058
work-life barance ori			0.001	0.051
skill exercising orien	tation		-0.020	0.057
Regular employee or			-0.200 ***	0.049
Client firm		e (on the basis of less than 100 employees)	-0.015	0.085
	300 employees or mor	e	-0.109	0.099
	1,000 employees or m	ore	0.039	0.079
	Manufacturing		-0.074	0.064
	Information and teleco	ommunication	-0.050	0.079
	Wholesale and retail		-0.053	0.081
	Finance and insurance		-0.024	0.088
Temporary agency	Company size (major	= 1, medium or smaller $= 0$)	0.155	0.102
	Capital pattern (indep	endent = 1, capital = 0)	-0.175	0.110
Overall human	Client firm		0.028 *	0.016
resource functions	Temporary agency		0.078 ***	0.017
Procurement	Client firm	Clarification of work contents		
		Clarification of required		
		human resources		
	Temporary agency	Provision of information on client firms		
		Interview on desire and experience		
Training	Client firm	Explanation of business knowledge and know-how		
		Explanation of workplace rules		
	Temporary agency	Opportunities for education/training		
		Opportunities for career counseling		
Evaluation/	Client firm	Clarification of evaluation criteria	1	
treatment		Feedback of evaluation results		
	Temporary agency	Wage management		
		Provision of employment opportunities		
Others	Client firm	Improvement of work environment	1	
		Information sharing		
	Temporary agency	Complaint handling		
		Welfare		
Value F			2.522 ***	
R2			0.107	

Note: N=863. ***: p<0.01, **: 0.01<p<0.05, *: 0.05<p<0.1.

Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
26.441	24.425	24.649	24.372	20.624	25.180	22.666	24.174
0.008	0.006	0.009	0.006	0.007	0.006	0.008	0.006
-0.080	0.082	-0.094	0.082	-0.086	0.082	-0.077	0.082
-0.002	0.071	0.008	0.071	0.005	0.071	0.005	0.071
-0.088	0.073	-0.093	0.072	-0.075	0.073	-0.065	0.072
-0.089	0.092	-0.085	0.092	-0.090	0.092	-0.095	0.092
0.048	0.108	0.072	0.108	0.058	0.108	0.052	0.107
0.016	0.078	0.023	0.078	0.028	0.078	0.005	0.078
-0.053	0.074	-0.053	0.073	-0.063	0.073	-0.070	0.073
-0.083	0.070	-0.083	0.069	-0.076	0.070	-0.078	0.070
0.086	0.094	0.094	0.094	0.086	0.094	0.110	0.094
-0.014	0.107	0.037	0.106	0.028	0.107	0.031	0.106
-0.073	0.133	-0.075	0.133	-0.055	0.134	-0.056	0.134
0.002	0.050	0.016	0.049	0.009	0.049	0.008	0.050
-0.052	0.050	-0.065	0.050	-0.050	0.050	-0.061	0.050
0.001	0.049	-0.006	0.049	0.006	0.049	0.000	0.049
-0.071	0.067	-0.080	0.067	-0.073	0.067	-0.085	0.066
0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
-0.003	0.002	-0.003	0.002	-0.003	0.002	-0.004	0.002
0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
0.002	0.014	0.002	0.014	-0.003	0.014	0.000	0.014
-0.002	0.001	-0.002	0.001	-0.002	0.001	-0.002	0.001
-0.032	0.030	-0.024	0.029	-0.023	0.029	-0.028	0.029
-0.013	0.012	-0.012	0.012	-0.010	0.013	-0.011	0.012
-0.118	0.077	-0.110	0.076	-0.106	0.077	-0.109	0.076
0.070	0.059	0.080	0.058	0.096 *	0.058	0.082	0.058
0.016	0.052	0.021	0.052	0.019	0.052	0.001	0.052
-0.007	0.058	0.003	0.057	0.013	0.057	-0.008	0.057
-0.196 ***	0.050	-0.196 ***	0.049	-0.197 ***	0.050	-0.193 ***	0.049
-0.019	0.086	-0.021	0.086	-0.022	0.086	-0.037	0.086
-0.116	0.101	-0.124	0.100	-0.124	0.100	-0.140	0.100
0.027	0.080	0.033	0.080	0.024	0.080	0.021	0.079
-0.066	0.065	-0.051	0.065	-0.060	0.065	-0.080	0.065
-0.028	0.080	-0.034	0.080	-0.033	0.080	-0.034	0.080
-0.068	0.082	-0.061	0.082	-0.062	0.082	-0.075	0.081
-0.021	0.089	-0.021	0.088	-0.025	0.089	-0.044	0.089
0.138	0.104	0.150	0.104	0.159	0.104	0.167	0.104
-0.107	0.110	-0.178	0.111	-0.129	0.111	-0.172	0.111
0.107	0.110	0.170	0.111	0.12)	0.111	0.172	0.111
-0.011	0.049						
0.111 *	0.063						
0.098 **	0.050						
0.076 *	0.058						
		0.071	0.051				
		-0.045	0.051				
		0.141 **	0.076				
		0.133 ***	0.052				
				0.094 *	0.052		
				0.054	0.049		
-				-0.003	0.055		
				0.101 **	0.053		
						0.055	0.052
						0.009	0.067
-						0.127 ***	0.049
						0.143 ***	0.050
1.949 ***		2.064 ***		1.932 ***		2.134 ***	

Resource Managements on the Commitment to Temporary Agencies

"explanation of workplace rules" in the training function, "clarification of evaluation criteria" and "feedback of evaluation results" in the evaluation/treatment function and "improvement of working environment" and "information sharing" in other functions have a positive impact on their commitment to client firms. There was no variable having a significant impact in the temporary agencies' human resource management.

The analysis result on the temporary agency workers' commitment to temporary agencies is shown in Table 6. As entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on their commitment to temporary agencies. However, unlike commitment to client firms, temporary agencies' human resource management has a greater impact on the workers' commitment to temporary agencies. Focusing attention on the result of individual functions, in the procurement function, client firms' "clarification of required human resources" and temporary agencies' "provision of client firms' information" and "asking hopes and experience" have a positive impact on their commitment to temporary agencies, while in the functions other than procurement, temporary agencies' human resource management has a significant positive impact on their commitment to temporary agencies. Particularly, "education/training" and "career counseling" in the training function, "provision of employment opportunities" in the evaluation/treatment function and "complaint handling" and "welfare programs" in other functions have a positive impact on the workers' commitment to temporary agencies. On the other hand, as client firms' human resource management, "clarification of evaluation criteria" in the evaluation/treatment function has a significant positive impact.

As above, as entire human resource functions, human resource managements of client firms and temporary agencies have a significant positive impact on all types of willingness to work, and accordingly, both client firms' and temporary agencies' human resource managements are important in order to encourage temporary agency workers' willingness to work.

However, the impact of client firms' human resource management on willingness to work is different from that of temporary agencies' one depending on the type of willingness to work. The importance of client firms' human resource management is the same as that of temporary agencies' one for willingness to work on a short-term basis such as work motivation, the importance of client firms' human resource management is different from that of temporary agencies' one for willingness to work on a long-term basis such as commitment to client firms or temporary agencies.

The impact of client firms' and temporary agencies' human resource managements on the willingness to work is also different depending on individual functions such as procurement, training and evaluation/treatment. In the procurement function, both client firms' and temporary agencies' human resource managements have a significant positive impact on all types of willingness to work, but in other functions, either one has a significant positive impact. Especially for willingness to work on a long-term basis, the impact of human resource managements such as training and evaluation/treatment differs.

At this point, I will point out some variables other than client firms' and temporary agencies' human resource managements, which have a significant impact on temporary agency workers' willingness to work. Among job characteristics variables, autonomous job dummy has a significant positive impact on their work motivation and commitment to client firms. Even in the white-collar jobs, to give temporary agency workers leeway to decide the job performance process, i.e., to decide how to work by themselves encourages their work motivation and commitment to client firms. Humdrum job dummy has no significant impact on their work motivation but has a significant negative impact on their commitment to client firms. Humdrum jobs seem to discourage workers' willingness to work continuously for the same client firms. In addition, the regular employee orientation dummy has a significant negative impact on commitment to client firms and temporary agencies. The more the temporary agency worker hopes to work as a regular employee, the lower the willingness to work continuously for the same client firm or through the same temporary agency becomes.

VI. Analysis Results of Divided Samples

Next, focusing attention on the type of temporary agency workers, I examined the impact of client firms' and temporary agencies' human resource managements on the will-ingness to work.

1. Skill Expertise

As a type of temporary agency workers, I focused on their skill expertise. Although it is indicated in the past studies that temporary agency workers with high degree of skill expertise are highly interested in the work contents and the expertise compared with those with low degree of expertise (Futagami 2002),¹⁸ since the workers' commitment to jobs and skills and long-term career development are different depending on the level of expertise, it is possible that the impact of client firms' human resource management is different from that of temporary agencies' one. In this paper, temporary agency workers' skill expertise is replaced with their jobs. Among white-collar jobs, trade office work, sales office work and accounting work are considered to require relatively higher expertise than general office work. Therefore, I divided samples into the general office work as a job with low degree of expertise and other jobs as with high degree of expertise, and conducted a multiple regression analysis in the same way.

Analysis results are shown in Table 7. Regarding work motivation, as entire human resource functions, both client firms' and temporary agencies' human resource managements

¹⁸ Futagami (2002) analyzed the commitment to jobs and organizations for Japan's registered agency workers. For recent studies on job attitudes and motivation of contingent workers including temporary agency workers and organizational commitment, see Connelly & Gallagher (2004).

			Work motivation	otivation		Comm	utment to	Commitment to client firms		Commitr	nent to te	Commitment to temporary agencies	ncies
		High expertise		Low expertise	ertise	High expertise		Low expertise		High expertise	ertise	Low expertise	ertise
		Coefficient Standard error		Coefficient Standard error	Standard error	Coefficient Standard error		Coefficient Standard error		Coefficient Standard error	Standard error	Coefficient	Standard error
Overall human	Client firms	0.102 ***	0.043	0.061 **	0.029	0.077 ***	0.035	0.156 *** 0	0.021 -	-0.029	0.031	0.050 ***	0.019
resource functions	Temporary agencies	0.036 *	0.048	0.091 ***	0.031	0.034 *	0.038	0.018 0	0.022	0.097 ***	0.034	0.072 ***	0.020
Value F		1.358 *		2.384 ***		1.458 **		4.561 ***		1.481 **		2.017 ***	
R2		0.155		0.132		0.188		0.225		0.191		0.114	
Sample size		278		585		278		585		278		585	
Procurement	Client firm Clarification of work contents	0.101	0.137	-0.121	0.088	0.053	0.108	0.246 *** 0	0.065 -	-0.009	0.096	-0.016	0.059
	Clarification of required human resources	0.273 *	0.161	0.309 ***	0.119	0.338 *** (0.128	0.212 ** 0	0.089	0.307 ***	0.113	0.009	0.080
	ary Provision of information on client firms	-0.009	0.132	0.152 *	0.090	-0.031	0.105	0.119 * 0	0.067	0.064	0.093	0.146 **	0.060
	agency Interview on desire and experience	-0.010	0.164	-0.017	0.104	0.118	0.130	0.125 * 0	0.077	0.031	0.115	0.097 *	0.069
Training	Client firm Explanation of business knowledge and know-how	0.176	0.135	0.020	0.092	0.098	0.109	0.104 0	0.069	0.028	0.096	0.068	0.061
	Explanation of workplace rules	0.214 *	0.131	0.118	0.094	0.117	0.106	0.168 ** 0	0.071 -	-0.212 **	0.093	0.045	0.063
	Temporary Opportunities for education/training	0.361 **	0.187	0.326 ***	0.144	-0.061	0.151	0.042 0	0.108	0.160	0.133	0.101	0.096
	agency Opportunities for career counseling	-0.133	0.149	0.086	0.095	-0.219 *	0.120	-0.043 0	0.072	060.0	0.106	0.143 ***	0.063
Evaluation/treatmen	Evaluation/treatment Client firm Clarification of evaluation criteria	0.173	0.141	0.181 *	0.096	0.007	0.112	0.391 *** 0	0.070 -	-0.126	0.100	0.183 ***	0.064
	Feedback of evaluation results	0.186 *	0.134	0.058	0.088	0.033	0.106	0.124 ** 0	0.065 -	-0.041	0.095	0.076	0.058
	Temporary Wage management	0.135	0.152	0.265 ***	0.103	0.005	0.120	0.118 * 0	0.075	0.053	0.108	-0.032	0.068
	agency Provision of employment opportunities	0.008	0.143	-0.028	0.099	0.367 ***	0.113	0 060.0-	0.073	0.150 *	0.101	0.083	0.066
Others	Client firm Improvement of work environment	0.056	0.152	0.075	0.095	020.0-	0.120	0.177 ** 0	0.071 -	-0.115	0.105	0.120 *	0.063
	Information sharing	0.089	0.213	0.063	0.116	0.346 **	0.168	0.106 0	0.087 -	-0.019	0.148	0.001	0.077
	ary	0.104	0.138	0.078	0.087	0.048	0.109	0.084 0	0.066	0.167 *	0.096	0.120 **	0.058
		-0.037	0.136	0.141	0.092	0.141	0.108	-0.003 0	0.069	0.229 **	0.095	0.112 *	0.061

Other than above, control variables shown in Table 4 are applied.
 Analysis results of procurement, training, evaluation/treatment and others show results of the multiple regression analysis conducted by human

resource functions.

Table 7. Impact of Client Firms' and Temporary Agencies' Human Resource Managements on the Willingness to Work-Skill Expertise

Japan Labor Review, vol. 6, no. 4, Autumn 2009

have a significant positive impact on both samples. Both client firms' and temporary agencies' human resource managements are important in order to encourage the workers' work motivation.

Concerning commitment to client firms, as entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on samples with high degree of expertise, but only client firms' human resource management has a significant positive impact on samples with low degree of expertise. Although client firms' human resource management is important in order to encourage the temporary agency workers' commitment to client firms, temporary agencies' human resource management is also important for the workers with high degree of expertise.

As for commitment to temporary agencies, as entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on samples with low degree of expertise, but only temporary agencies' human resource management has a significant positive impact on samples with high degree of expertise. Temporary agencies' human resource management is important in order to encourage the temporary agency workers' commitment to temporary agencies, but client firms' human resource management is also important for the workers with low degree of expertise.

As above, the impact of client firms' human resource management on the willingness to work is different from that of temporary agencies' one depending on temporary agency workers' skill expertise. Although both client firms' and temporary agencies' human resource managements are important in order to encourage willingness to work on a short-term basis such as work motivation, in order to encourage willingness to work on a long-term basis such as commitment to client firms of temporary agencies, client firms' human resource management is important for temporary agency workers with high degree of expertise while temporary agencies' human resource management is important for those with low degree of expertise.¹⁹

2. Career Orientation

As another type of temporary agency workers, I focused on temporary agency workers' career orientation. The past studies (e.g., Sato [1998], etc.) indicate that temporary agency workers have labor orientation and career orientation such as job selection, balancing work and life and skill exercising which are different from regular employees' labor and career orientations. On the other hand, it is also pointed out that there are many temporary agency workers who wanted to work as regular employees but are forced to choose the way

¹⁹ Skill expertise may reflect temporary agency workers' working orientation and career orientation at the same time. Comparing samples of the general office work with those of work other than general office work, the career orientation used in this paper is job selection orientation (74.3% and 79.6%), work-life balance orientation (35.1% and 35.8%), skill exercising orientation (22.1% and 29.6%) and regular employee orientation (51.9% and 56.7%) respectively.

of working as temporary agency workers.²⁰ In this paper, focusing attention on regular employee orientation, I created divided samples on the basis of whether or not they want to work as regular employees and conducted the multiple regression analysis.

Analysis results are shown in Table 8. Regarding work motivation as entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on both samples. Both client firms' and temporary agencies' human resource managements are important in order to encourage the workers' work motivation.

Concerning commitment to client firms, as entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on samples with high degree of regular employee orientation, but only client firms' human resource management has a significant positive impact on samples with low degree of regular employee orientation.

In the same way, as for commitment to temporary agencies, as entire human resource functions, both client firms' and temporary agencies' human resource managements have a significant positive impact on samples with high degree of regular employee orientation, but only temporary agencies' human resource management has a significant positive impact on samples with low degree of regular employee orientation. Both client firms' and temporary agencies' human resource managements are important to encourage the willingness to work on a long-term basis of temporary agency workers with high degree of regular employee orientation.

As above, the impact of client firms' human resource management on the willingness to work is different from that of temporary agencies' one depending on temporary agency workers' career orientation. Both client firms' and temporary agencies' human resource managements are important in order to encourage the willingness to work on a short-term basis such as work motivation. Although either client firms' or temporary agencies' human resource management is important for temporary agency workers with low degree of regular employee orientation in order to encourage willingness to work on a long-term basis such as commitment to client firms or temporary agencies, both client firms' and temporary agencies' human resource managements are important for those with high degree of regular employee orientation.

VII. Additional Analysis

Next, as an additional analysis, I examined the impact of client firms' and temporary agencies' human resource managements taking up temporary agency workers' attitudes

²⁰ Many respondents answered "there was no company I could work as a regular employee." as the reason for working as temporary agency workers. As many as 39.6% (multiple answers) of respondents in "Survey on Diversification of Employment Patterns" of Ministry of Health, Labour and Welfare and 29.4% (multiple answers) in this survey have answered the same.

Table 8	. Impact	Table 8. Impact of Client Firms' and Temporary Agencies' Human Resource Managements on Willingness to Work—Career Orientation	gencies' H	umaı	n Resou	rce Mâ	anagemen	ts on	Willingn	ess to	Work—	Caree	r Orienta	ttion
			M	ork mo	Work motivation		Comn	nitment to	Commitment to client firms		Commitn	nent to ter	Commitment to temporary agencies	cies
			Degree of regular employee orientation:		Degree of regular employee orientation:		Degree of regular employee orientation:		Degree of regular employee orientation:		Degree of regular employee orientation:		Degree of regular employee orientation:	egular entation:
			High Coefficient Sta	p.	Low Coefficient Standard	Standard	High Coefficient Standard	tandard	Low Coefficient Standard	Standard	High Coefficient Standard	Standard	Low Coefficient	
Overall	Client firms		e 0.072 **	error 0.032	0.089 ***	error 0.037	0.141 ***	error 0.024	0.117 ***	епог 0.027	0.036 *	0.022	0.002	0.024
human resource functions	Temporary agencies	gencies	0.126 ***	0.034	0.025 *	0.039	0.038 *	0.026	0.024	0.029	0.092 ***	0.024	0.046 *	0.026
Value F			1.875 * * *		1.357 *		2.948 * * *		2.524 ***		1.423*		1.487 **	
R2			0.152		0.100		0.211		0.210		0.114		0.135	
Sample size			459		400		459		400		459		400	
Procuremen	Procurement Client firm	Clarification of work contents		0.098	0.082	0.113	0.222 * * *	0.075	0.096	0.084	0.023	0.068	-0.069	0.073
		Clarification of required human resources	0.455 * * *	0.127	0.147	0.146	0.315 * * *	0.097	0.149	0.108	0.077	0.089	0.134	0.095
	Temporary	Provision of information on client firms	0.079	0.101	0.080	0.113	0.166 **	0.077	0.037	0.084	0.203 ***	0.071	-0.026	0.073
	agency	Interview on desire and experience	0.229 **	0.116	0.116 -0.245 *	0.133	0.204 **	0.088	0.056	0.098	0.036	0.081	0.101	0.086
Training	Client firm	Explanation of business knowledge and know-how		0.104	0.016	0.116	0.103	0.081	0.112	0.086	0.018	0.073	0.114	0.075
	ļ	Explanation of workplace rules		0.106	0.095	0.115	0.229 * * *	0.083	0.069	0.084	0.008	0.075	-0.123*	0.074
	Temporary	Opportunities for education/training	0.433 * * *	0.150	0.120	0.179	-0.001	0.117	0.077	0.132	0.238 **	0.105	-0.035	0.115
	agency	Opportunities for career counseling	0.136	0.107 -0.032	-0.032	0.121	-0.105	0.084	-0.066	0.089	0.085	0.075	0.153 **	0.077
Evaluation/ treatment	Client firm	Clarification of evaluation criteria	0.176*	0.105	0.212*	0.122	0.223 ***	0.081	0.301 ***	060.0	0.046	0.072	0.124*	0.080
		Feedback of evaluation results	-0.021	0.100	0.254 **	0.110	0.140 **	0.077	0.079	0.081	0.167 **	0.069	-0.082	0.072
	Temporary	Wage management	0.217 **	0.114	0.287 **	0.125	-0.010	0.088	0.106	0.092	0.064	0.079	-0.053	0.082
	agency	Provision of employment opportunities	0.055	0.112	-0.088	0.122	0.036	0.086	0.135	0.090	0.103 *	0.077	0.135 *	0.080
Others	Client firm	Improvement of work environment	0.117	0.105	0.059	0.126	0.089	0.082	0.116	0.092	0.107 *	0.073	-0.082	0.081
		Information sharing	0.036	0.138	0.104	0.154	0.109	0.107	0.249 **	0.113	-0.045	0.095	0.104	0.099
	Temporary	Complaint handling	0.118	0.100	0.055	0.113	0.149 **	0.078	-0.050	0.082	0.177 ***	0.069	0.032	0.072
	agency	Welfare	0.281 ***	0.103	-0.131	0.115	0.048	0.080	0.024	0.084	0.107 *	0.071	0.149 **	0.074

*: 0.05<p<0.1. **: 0.01<p<0.05, Notes: 1. ***: p<0.01,

 Other than above, control variables shown in Table 4 are applied.
 Analysis results of procurement, training, evaluation/treatment and others show results of the multiple regression analysis conducted by human resource functions.

			Satisfaction current way o		Future career	outlook
_			Coefficient	Standard error	Coefficient	Standard error
Overall huma	an Client firm	IS	0.151 ***	0.067	0.048*	0.075
resource functions	Temporary	agencies	0.107*	0.068	0.171 ***	0.078
-2 log likeliho	od		672.833		548.907	
Chi square			99.636***		115.517***	
Pseudo R2 (Co	ox and Snell)		0.136		0.156	
Procurement	Client firm	Clarification of work contents	0.013	0.177	0.068	0.206
		Clarification of required human resources	0.474**	0.220	0.029	0.252
	Temporary	Provision of information on client firms	0.353**	0.179	0.164	0.210
	agency	Interview on desire and experience	0.233	0.219	-0.298	0.249
Training	Client firm	Explanation of business knowledge and know-how	0.098	0.187	-0.006	0.217
		Explanation of workplace rules	0.250*	0.187	0.140	0.220
	Temporary	Opportunities for education/training	0.831 ***	0.313	0.172	0.343
	agency	Opportunities for career counseling	0.081	0.188	0.635 ***	0.219
Evaluation/	Client firm	Clarification of evaluation criteria	0.392**	0.196	-0.173	0.225
treatment		Feedback of evaluation results	0.203	0.175	0.637***	0.209
	Temporary	Wage management	-0.142	0.198	0.065	0.237
	agency	Provision of employment opportunities	-0.223	0.194	-0.455 **	0.232
Others	Client firm	Improvement of work environment	0.240	0.196	0.045	0.227
		Information sharing	-0.001	0.243	-0.138	0.284
	Temporary	Complaint handling	0.218	0.175	0.550***	0.208
	agency	Welfare	0.012	0.182	0.606 ***	0.226

Table 9. Impact of Client Firms' and Temporary Agencies' Human ResourceManagements on Temporary Agency Workers' Satisfaction

Notes: 1. N=859.

2. ***: p<0.01, **: 0.01<p<0.05, *: 0.05<p<0.1.

3. Other than above, control variables shown in Table 4 are applied.

4. Analysis results of procurement, training, evaluation/treatment and others show the results of logistic regression analysis conducted by human resource functions.

toward temporary agency work such as satisfaction with the current way of working and future career outlook. These attitudes toward work may not have a direct impact on temporary agency workers' productivity but are important indicators for workers. In order to develop a long-term career through temporary agency work, it would be necessary for workers to be satisfied with the current way of working and realize that the experience of temporary agency work is helpful for their future career.

As variables of attitudes toward temporary agency work, I used "satisfied with working as a temporary agency worker" (27.2%) for the satisfaction with the current way of working and "working as a temporary agency worker is helpful for career" (17.7%) for the future career outlook (percentage in parenthesis is the rate of "Yes"). These two variables are dummy variables (Yes = 1, No = 0). As an analysis method, I used the logistic regression analysis with these temporary agency workers' attitude variables as dependent variables, client firms' and temporary agencies' human resource managements as independent variables and individual characteristics and client firms' and temporary agencies' company characteristics as control variables.

Analysis results are shown in Table 9. Both client firms' and temporary agencies' human resource managements have a significant positive impact on the satisfaction with the current way of working and client firms' human resource management has a greater impact

than that of temporary agencies' one. Client firms' human resource management is more important in order to enhance the satisfaction with the current way of working.

On the other hand, both client firms' and temporary agencies' human resource managements have a significant positive impact on the future career outlook, but the temporary agencies' human resource management has a greater impact than that of client firms' one contrary to the current satisfaction. Temporary agencies' human resource management is more important in order to realize that temporary agency work is helpful for future career.

As above, both client firms' and temporary agencies' human resource managements have a significant positive impact on the satisfaction with the current way of working and future career outlook and client firms' human resource management has a greater impact on the current satisfaction and temporary agencies' human resource management has a greater impact on the future career outlook. It would appear that client firms' human resource management is more important for temporary agency workers to be satisfied with the current jobs and way of working, and temporary agencies' human resource management is more important to realize that temporary agency work is helpful for future career. It is indicated that temporary agencies' human resource management has a crucial role when temporary agency workers develop their long-term career.²¹

VIII. Conclusions

In this paper, I focused on the temporary agency workers' willingness to work and examined temporary agency workers' human resource management in an exploratory manner. Paying attention to employment structure characteristics of temporary agency work, i.e., separation of human resource functions, I sorted out client firms' and temporary agencies' human resource managements and statistically examined the impact of those human resource managements on willingness to work using data from questionnaire survey conducted by the Institute of Social Science, the University of Tokyo.

As the analysis results of this paper, the following six points can be pointed out:

1) Both client firms' and temporary agencies' human resource managements have a significant positive impact on the temporary agency workers' willingness to work. Client firms' and temporary agencies' human resource managements have a significant positive impact on not only willingness to work on a short-term basis, i.e., work motivation but also willingness to work on a long-term basis, i.e., commitment to client firms or temporary agencies. Both client firms' and temporary agencies' human resource managements are important in order to encourage willingness to work.

2) The impact of client firms' human resource management is different from that of

²¹ Sato (2006) cites creation of employment opportunities and career development support as social functions of temporary help service industry. Tsuchida (2004) picks up the conversion from temporary agency workers to regular employees from the viewpoint of legal policy and discusses on "employment placement dispatching."

temporary agencies' one depending on the type of willingness to work. The impact of client firms' human resource management is the same level of that of temporary agencies' one for the workers' work motivation, but client firms' human resource management has a greater impact on their commitment to client firms, and temporary agencies' human resource management has a greater impact on their commitment to temporary agencies. The importance of client firms' human resource management is the same as that of temporary agencies' one in order to encourage temporary agency workers' willingness to work on a short-term basis but is different from that of temporary agencies' one in order to encourage their willingness to work on a long-term basis.

3) The impact of client firms' human resource management is different from that of temporary agencies' one depending on individual functions such as procurement, training and evaluation/treatment. In the procurement function, both client firms' and temporary agencies' human resource managements have a significant positive impact on all types of willingness to work. As functions other than procurement, both client firms' and temporary agencies' human resource managements have a significant positive impact on the temporary agencies' human resource managements have a significant positive impact on the temporary agencies' human resource managements have a significant positive impact on the temporary agencies workers' work motivation, but client firms' human resource management has a positive impact on their commitment to client firms and temporary agencies' human resource management has a positive impact on their commitment to temporary agencies. In the procurement function, the importance of client firms' human resource management is the same as that of temporary agencies' one, but in training and evaluation/treatment functions, it is different from the importance of temporary agencies' human resource management functions, it is different from the importance of temporary agencies' human resource management functions, it is different from the importance of temporary agencies' human resource management functions, it is different from the importance of temporary agencies' human resource management functions, it is different from the importance of temporary agencies' human resource management functions.

4) The impact of client firms' human resource management is different from that of temporary agencies' one depending on temporary agency workers' skill expertise. Both client firms' and temporary agencies' human resource managements have a positive impact on their work motivation regardless of the expertise level. However, in case of temporary agency workers with high degree of expertise, temporary agencies' human resource management has a positive impact on their commitment to client firms or temporary agencies, and conversely, in case of those with low degree of expertise, client firms' human resource management has a positive impact on them. From a long-term standpoint, temporary agencies' human resource management is more important for temporary agency workers with high degree of expertise and client firms' human resource management is more important for temporary agency workers with high degree of expertise.

5) The impact of client firms' human resource management is different from that of temporary agencies' one depending on temporary agency workers' career orientation. Both client firms' and temporary agencies' human resource managements have a positive impact on their work motivation regardless of whether or not they are regular employee-oriented. However, in case of temporary agency workers with low degree of regular employee orientation, client firms' human resource management has a positive impact on their commitment to client firms and temporary agencies' human resource management has a positive impact on their commitment to client firms and temporary agencies' human resource management has a positive impact

on their commitment to temporary agencies, while in case of those with high degree of regular employee orientation, both client firms' and temporary agencies' human resource managements have a positive impact on any type of willingness to work. From a long-term standpoint, both client firms' and temporary agencies' human resource managements are important for temporary agency workers who want to work as regular employees.

6) Both client firms' and temporary agencies' human resource managements have a significant positive impact on satisfaction with the current way of working and future career outlook. Client firms' human resource management has a greater impact on the current satisfaction with working as temporary agency workers, and temporary agencies' human resource management has a greater impact on the long-term outlook that temporary agency work is helpful for future career. Client firms' human resource management is more important for temporary agency workers to be satisfied with the way of working on temporary agency work and temporary agencies' human resource management is more important for a long-term career outlook.

IX. Implication and Future Issues

These analysis results indicate that although the human resource management of temporary agency work is separated into client firms and temporary agencies, temporary agency workers' willingness to work could be encouraged if client firms and temporary agencies would implement their limited human resource functions together. This tells that both client firms' and temporary agencies' human resource managements are necessary to encourage their willingness to work and raise the possibility of human resource management based on the inter-organizational relationship between them.

The human resource management on the basis of inter-organizational relationship is not the human resource management in which the internal labor market is used on the premise of a long-term employment relationship like regular employees (Morishima 2004) nor the use of human resources which leans on the external labor market based on a short-term spot contract like contract company workers or freelancers (Murata 2004; Shu 2006). It is a human resource management with procurement, training and evaluation/treatment functions on the basis of a long-term inter-organizational partnership between client firms and temporary agencies. In other words, it is an intermediate labor market built by client firms and temporary agencies. In the intermediate labor market under inter-organizational relationship, temporary agency workers can secure a long-term employment opportunities working on a short term basis repeatedly and client firms and temporary agencies can develop temporary agency workers' skills on a long term basis using them for short-term jobs. Client firms and temporary agencies can efficiently conduct human resource management through the process of procurement, training and evaluation/treatment by accumulating and organizing not only information on client firms' jobs and workplaces but also information on temporary agency workers' abilities, skills, performances and willingness to work between the companies. Although this concept of human resource management based on inter-organizational relationship remains a matter of speculation, analysis results of this paper indicate that both client firms' and temporary agencies' human resource managements are necessary in order to encourage temporary agency workers' willingness to work and suggest the need to build a framework of human resource management on the basis of inter-organizational relationship between client firms and temporary agencies.²²

These suggestions seem to be natural when considering the structural characteristics of temporary agency work where the human resource management which should have been unified is now separated into client firms and temporary agencies. In fact, the bottom line is that the impact of client firms' human resource management is different from that of temporary agencies' one depending on the types of willingness to work and human resource functions. It is highly possible that many of past studies were very interested in particular systems and design of measures for human resource functions in considering human resource management which encourages temporary agency workers' willingness to work. The analysis results in this paper, however, tell that role-sharing viewpoint, i.e., which human resource management actor is in charge of human resource practices, is important as well as designing these practices. The framework which combines the human resource practices with the human resource management actors can be applied when considering role-sharing between the personnel department and the line manager for human resource management for employees such as regular employees and part-time workers. In addition, the viewpoint of role-sharing of human resource functions raises the possibility of cooperation between client firms and temporary agencies for human resource management of temporary agency work. These study subjects would become clear through a comparative analysis with engineering temporary agency work and temporary agency work in production sites which could not be used in this paper due to limited data and surveys of companies, i.e., client firms and temporary agencies.

²² The conventional discussions on intermediate labor market are, as it is called as "quasi-internal labor market", centered on staff deployment problems such as temporary transfer and employment transfer within the company group (e.g., Nagano (1995)). The human resource management and intermediate labor market on the basis of inter-organizational relationship suggested in this paper are based on the premise that the framework of human resource management including not only staff deployment but also human resource development and evaluation/treatment is built not exclusively within the company group.

				N	Average	Standard deviation	Maximum	Minimum
Willingness t	to work	Work motivati	on	860	2.807	1.022	4	0
		Commitment t		858	1.132	0.803	2	0
			o temporary agencies	849	1.206	0.696	2	0
			th the current way of working	859	0.272	0.445	1	0
X 12 1 1 1 4		Future career o	butlook	859	0.177	0.382	1	0
Individual at	tributes	Age		857	32.650	5.431	55	21
		Career college	junior college graduates	862 862	0.155 0.335	0.363 0.472	1	0
			and graduate school graduates	862	0.335	0.472	1	0
		With spouse (858	0.260	0.439	1	0
		With child(ren		858	0.059	0.237	1	ů 0
) living together (Yes $= 1$)	858	0.490	0.500	1	Ő
		Person response	tible for household budget (Myself = 1,	859	0.353	0.478	1	0
		Others $= 0$)		839	0.555	0.478	1	0
		Sales office we	ork	863	0.152	0.359	1	0
		Accounting we		863	0.072	0.258	1	0
		Trading office		863	0.058	0.234	1	0
		Finance office		863	0.041	0.197	1	0
		Autonomous je	0b	863	0.504	0.500	1	0
		Subsidiary job		863 863	0.503 0.402	0.500 0.491	1	0
		Humdrum job Working days	a week	863 861	4.934	0.491	5	0
		Working minu		850	444.678	39.507	480	60
		Monthly overt	-	858	9.098	10.199	70	0
			d as temporary agency worker (months)	849	53.041	44.459	300	1
			ent firms worked	850	2.951	2.538	30	1
			d in the current temporary agency (months)	859	25.685		216	1
			porary agencies employed	844	1.664	0.966	7	1
		Registered yea	r in the current temporary agency	850	2001.524	3.596	2005	1978
			ce as a regular employee (Yes = 1)	841	0.880	0.325	1	0
		Job selection of		858	0.760	0.427	1	0
			nce orientation	858	0.353	0.478	1	0
		Skill exercisin		858	0.245	0.430	1	0
<u></u>			yee orientation	859	0.534	0.499	1	0
Client firms		100 employees		842	0.227	0.419	1	0
		300 employees 1,000 employe		842 842	0.122 0.529	0.328 0.499	1	0 0
		Manufacturing		841	0.329	0.499	1	0
			d telecommunication	841	0.290	0.434	1	0
		Wholesale and		841	0.136	0.343	1	0
		Finance and in		841	0.138	0.345	1	0
Temporary a	gencies		(major = 1, medium or smaller = 0)	863	0.664	0.473	1	0
1 5 .	0		(independent = 1, capital = 0)	863	0.721	0.449	1	0
Human	Overall	Client firm		825	4.530	1.544	8	0
resource		Temporary age		799	4.733	1.541	8	1
management	Procurement	Client firm	Clarification of work contents	863	0.477	0.500	1	0
			Clarification of required human resources	853	0.181	0.385	1	0
		Temporary	Provision of information on client firms	839	0.472	0.500	1	0
		agency	Interview on desire and experience	854	0.753	0.432	1	0
	Training	Client firm	Explanation of business knowledge and	859	0.600	0.490	1	0
			know-how	0.61	0.590	0.404	1	0
		T	Explanation of workplace rules	861	0.580	0.494	1	0
		Temporary agency	Opportunities for education/training	847	0.874	0.332	1	0
	Evoluction /	Client firm	Opportunities for career counseling Clarification of evaluation criteria	847 843	0.398	0.490	1	0
	Evaluation/ treatment	Chent firm	Feedback of evaluation results	843 851	0.696	0.460	1	0
	acamicin	Temporary	Wage management	836	0.467	0.499	1	0
		agency	Provision of employment opportunities	863	0.665	0.475	1	0
	Others	Client firm	Improvement of work environment	863	0.482	0.300	1	0
	Juicis	Chem IIIII	Information sharing	863	0.085	0.403	1	0
		Temporary	Complaint handling	859	0.437	0.302	1	0
		agency	Welfare	847	0.621	0.490	1	0
			······································	017	0.021	0.405	1	0

Appendix Table: Basic Statistics of Variables Used for the Analysis

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