Human Resources Development at Companies in the Service Industry

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In recent years, human resources development in the service industry have started to draw public attention from the perspective of improving productivity and promoting industries that may create new jobs. This report first examines the difference in the implementation of human resources development targeted at core personnel among companies in the service industry. Then, it analyzes the impact of such corporate activities as clarifying the skills required of core personnel and using professional certifications as a benchmark of the implementation of human resources development. As a result, the report concludes that companies that vigorously implement such corporate activities are more active in implementing human resources development than others.

I. Introduction

It is a long time since the beginning of the discussion about a shift to a service economy in Japan, which started as the number of workers in the service industry exceeded the number of workers in manufacturing industry. Human resources development in the manufacturing industry has often attracted public attention in relation to such issues as keeping Japanese companies' international competitiveness and passing technical and engineering skills to younger generations amid worries over the so-called "year 2007 problem," which refers to the start of mass retirement of baby boomers. However, the services industry has drawn scant interest in that respect. Still, in recent years—especially since the recession was triggered by the global financial crisis in the latter half of 2008—promoting personnel training in the nursing care sector, which is part of the service industry, has started to attract public interest gradually, as a manpower shortage in that sector has emerged as a major issue amid efforts to create new jobs to mitigate the impact of the economic crisis. Moreover, there is also a move to create an environment conducive to the promotion of training and retention of high-quality personnel, regarded as the key to improving the Japanese service industry's productivity, which is said to be low by international standards.¹

From the perspective of economic activity and employment, as well—not to mention in light of the recent trend mentioned above—the method used to implement human resources development in the service industry, whose weight in the Japanese economy has grown, will likely have a significant impact on the entire economy and the majority of workers. Based on the results of a recent survey, this report looks into how human resources development are implemented in the Japanese service industry, as well as looking into

¹ Examples include activities by Service Productivity & Innovation for Growth, a group established in May 2007 following a debate conducted by a study group on the improvement of the service industry's productivity under the Ministry of Economy, Trade and Industry.

companies' initiatives that may promote human resources development.

II. Data

This report analyzes the results of the *Survey on Human Resources Development at Small and Medium-Size Companies in the Service Industry*² (the "Service Industry Survey," below), which was conducted in January through March 2009 by the Japan Institute for Labour Policy and Training (JILPT). This survey covered companies in the service industry in the Kanto region, a region in eastern Japan that includes Tokyo, which employ five workers or more. A total of 897 companies gave valid responses, bringing the effective response ratio to 25.8%.³

However, while the service industry comprises a number of business sectors, the range of sectors covered by this survey was narrowed down through the following process, in order to ensure efficient research and keep the effective response ratio at an adequate level. First, several business sectors as defined by the 2002 revised version of the Japan Standard Industrial Classification (which is a government-authorized classification) were selected, including "medical, health care, and social welfare"; "education and learning support"; and "services"; as well as "Information services," "Internet-based services" and "video picture, sound information, character information production and distribution," both of which are subcategories of "information and communications." The scope of the survey was further narrowed down, as the survey selected, from among subdivisions of these sectors, those that employ a relatively large number of workers according to the Establishment and Enterprise Census, conducted in 2006 by the Ministry of Internal Affairs and Communications, and those in which the number of workers showed a relatively high level of growth compared with the same survey conducted in 2001. Moreover, care was taken to ensure that business sectors that show distinct trends concerning skills development and career formation are covered by the survey, by taking account of the conditions of employee education and training and the job separation rate for permanent employees engaging in service jobs, as assessed through the Monthly Labour Survey by the Ministry of Health, Labour and Welfare, the Management Innovation in the Service Industry and Employee Wellbeing by JILPT (1997) and the Survey on Employment Conditions in Service by the Ministry of Health, Labour and Welfare (2003). Through the above process, eight business sectors were selected as the subjects of the survey: (i) building services, (ii) cram school management, (iii) hair dressing, (iv) information services, (v) funeral services, (vi) car

 $^{^{2}}$ For the details of the survey results, refer to the relevant survey report compiled by JILPT (2010).

³ In the survey, survey officials visited 3,482 companies headquartered in the prefectural capitals in the Kanto region (Tokyo, Yokohama, Chiba, Saitama, Mito, Maebashi, and Utsunomiya) to ask for cooperation with the survey and later revisited them to collect their replies.

Cram school management	Teachers (88.0)
Building services	General cleaning (63.9), Facility management (24.3)
Car mechanics	Car mechanics (76.5)
Information services	System engineers (42.7), Salesmen/Consultants (14.0), Programmers (11.9)
Funeral services	Ceremony staff (94.6)
Civil engineering & construction	Construction design (28.0), Civil engineering design (19.0), Land survey (14.9)
Hair dressing	Hair dressers (95.7)
Social welfare for the elderly	Nursing care staff including helpers and care managers (97.1)

Table 1. "Principal Job Roles" by Business Sector

Note: The figures in parentheses represent the percentage of companies in the business sector that cited the relevant principal job role.

mechanics, (vii) social welfare for the elderly and (viii) civil engineering and construction.⁴

III. Human Resources Development for Core Personnel: Differences among Business Sectors

In the Service Industry Survey, "the job which plays the central role in the provision of service as a part of the company's business and in which the most workers engage" is defined as the "principal job role," and people engaging in this type of job are regarded as "core personnel." Table 1 shows the principal job roles for the business sectors covered by this survey as identified on the basis of replies given by the subject companies. For social welfare for the elderly, cram school management, funeral services, and car mechanics, there is only one principal job role, while there are two or more principal job roles for information services and for civil engineering and construction.

How do individual companies implement human resources development for employees engaging in the principal job role? First, we will look at activities implemented internally by the companies. Asked whether they are conducting activities related to human resources development in the workplace (Table 2), a relatively large number of companies in the hair dressing sector replied in the affirmative with regard to all of the activities cited in the questionnaire, compared with companies in other sectors. Particularly, the percentage of companies implementing training and skills development according to a plan and under a designated leader was far higher in the hair dressing sector than elsewhere. Social welfare

 $^{^4}$ For the details on the selection of business sectors to be covered by the survey, refer to Fujimoto (2010).

Table 2.	. Workplace	Training A	Activities for	Employees	s Engaging	Workplace Training Activities for Employees Engaging in Principal Job Roles (%)	lob Roles ((%)	
	All respondents	Hair dressing	Social welfare for the elderly	Funeral services	Building services	Civil engineering Information & services construction	Information services	Car mechanics	Car Cram school mechanics management
u	897	70	104	56	144	168	143	162	50
Implementing training and skills development according to a plan under a designated leader	48.3	81.4	57.7	46.4	48.6	40.5	43.4	40.1	50.0
Using work process manuals for training and skills development	37.5	62.9	58.7	44.6	45.1	27.4	20.3	31.5	30.0
Taking care to ensure a transition from easy to difficult work	69.9	81.4	73.1	71.4	70.1	72.0	68.5	66.0	54.0
Requiring employees to experience related jobs on a rotation basis	43.5	52.9	51.0	44.6	43.8	50.6	35.7	39.5	24.0
Holding employee seminars and meetings for presenting proposals	41.0	67.1	62.5	35.7	29.2	41.1	43.4	25.3	44.0
Total number of companies conducting activities	240.1	345.7	302.9	242.9	236.8	231.5	211.2	202.5	202.0
Note: The above figures represent the combined percentages of companies that are actively implementing the activities and those implementing them somewhat actively.	ent the combined	l percentage	s of companies	s that are acti	vely implem	enting the activ	ities and tho	se implemen	ting them

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for the elderly came in second after hair dressing in terms of the combined percentage of companies conducting the various activities related to human resources development. Particularly, it nearly matches the hair dressing sector in terms of the percentage of companies holding employee seminars and meetings for presenting proposals. Meanwhile, the activities related to human resources development are sluggish in the car mechanics, cram school, and information services sectors. In the information services sector, the percentage of companies using work process manuals for training and skills development was particularly low, while in the cram school sector, the ratio of companies that require employees to experience related jobs on a rotation basis was conspicuously low.

Next, we will look at the implementation of off-the-job training (Off-JT) for employees engaging in the principal job role (Table 3). The percentage of companies not implementing off-JT was low in the social welfare for the elderly and hair dressing sectors, which means that sectors that are active in off-JT are the same as those that are active in implementing on-the-job training (OJT). In contrast, the percentage of companies not implementing off-JT was particularly high, at nearly 40%, in the funeral services sector. The percentage was also relatively high in the information services, civil engineering and construction, and cram school sectors. Given that workplace training activities in the funeral services sector are not sluggish, this sector apparently depends entirely on OJT for employee education and training. In business sectors that make active use of Off-JT, such as social welfare for the elderly and hair dressing, the objectives of the training frequently cited by the respondents were: helping to acquire expert knowledge and skills necessary for doing the job smoothly; helping to acquire new techniques, skills and knowledge; helping to develop a basic attitude toward work; and helping to acquire systematic knowledge and skills that are difficult to acquire through OJT.

How fully are companies committed to supporting education and training that employees engaging in the principal job role undertake voluntarily as a part of their self-development efforts (Figure 1)? In terms of the combined ratio of companies providing support and those considering doing so, social welfare for the elderly was ranked at the top, followed by the information services and civil engineering and construction sectors in that order. What is noteworthy is that this ratio is high in the information services sector, in which OJT and Off-JT activities are apparently sluggish. We may presume that in the information services sector, there is a strong awareness that employees should undertake education and training on their own initiative. Meanwhile, in the funeral services sector, in which the ratio of companies implementing Off-JT was low, the ratio of companies that provided support for employees' self-development efforts and those considering doing so was also not very high.

When we examine the implementation of education and training through various means, we recognize that business sectors may be classified into five broad groups: (i) a group represented by the social welfare for the elderly sector, which makes active use of all means, (ii) a group represented by the hair dressing sector, which makes active use of

	All respondents	Social welfare for the elderly	Hair dressing	Car mechanics	Building services	Civil engineering & construction	Civil engineering Cram school Information & management services construction	Information services	Funeral services
u	897	104	70	162	144	168	50	143	56
Helping to develop a basic attitude to work	30.4	45.2	40.0	29.6	31.3	23.2	32.0	26.6	21.4
Helping to acquire systematic knowledge and skills that are difficult to acquire through OJT	24.3	47.1	27.1	17.3	22.2	19.0	12.0	32.9	8.9
Helping to acquire expert knowledge and skills necessary for doing a job smoothly	38.1	58.7	44.3	37.7	38.9	35.7	20.0	34.3	25.0
Helping to acquire knowledge and learn theories that underlie the work method acquired through OJT	16.4	34.6	22.9	15.4	16.0	11.3	16.0	11.9	5.4
Helping to acquire knowledge and skills related to the operation of new equipment	12.5	15.4	21.4	21.0	9.7	9.5	4.0	9.1	3.6
Helping to acquire new techniques, skills and knowledge	33.9	46.2	42.9	40.7	23.6	37.5	24.0	29.4	16.1
Helping to systematically acquire knowledge and skills necessary at each stage of the career	12.0	21.2	25.7	9.3	0.6	6.5	12.0	13.3	7.1
Helping to obtain certifications related to work	15.2	23.1	14.3	16.0	20.1	19.0	6.0	4.9	8.9
Other	0.9	0.0	1.4	1.2	1.4	0.6	2.0	0.0	1.8
No reply	14.7	10.6	12.9	17.9	12.5	13.1	28.0	11.9	21.4
Not implementing Off-JT targeted at employees engaging in the main job	23.0	9.6	15.7	21.0	23.6	25.6	26.0	29.4	33.9

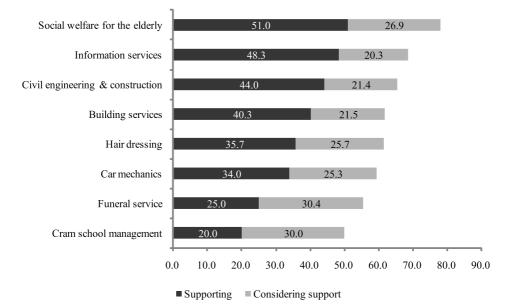


Figure 1. Provision of Support for Self-Development Efforts by Employees Engaging in Principal Job Roles (unit: %)

in-house activities, such as OJT and Off-JT, (iii) a group represented by the funeral services sector, which apparently depends entirely on OJT, (iv) a group represented by the information services and civil engineering and construction sectors, which depends heavily on self-development efforts, and (v) a group represented by the cram school sector, which does not make active use of any means.

When asked to cite problems that impede human resources development for employees engaging in the principal job role (Table 4), more than 20% of the companies surveyed replied that they did not recognize any particular problems in the funeral services, cram school, and car mechanics sectors, while that ratio was just around 10% in the social welfare for the elderly and information services sectors. What was notable about the social welfare for the elderly sector is that the ratio of companies that replied that employees quit their jobs soon after acquiring adequate skills was double or triple the ratio in other business sectors. This problem was also cited frequently in the hair dressing sector. This suggests that companies in these two sectors face difficulty retaining employees despite their active implementation of education and training. On the other hand, in the information services sector, in which the ratio of companies that did not recognize any particular problem was low as in the case of the social welfare for the elderly sector, many companies cited problems that are apparently caused by an excessive dependence on self-development efforts, such as that employees are too busy to undertake education and training and that it is quite costly to use external education and training institutions.

All Funeral Cram Car Hair engineering Building Information Soc respondents services management mechanics dressing & services services the el	All respondents	Funeral services	Cram school management	Car mechanics	Hair dressing	Civil Civil engineering & construction	Building services	Information services	Social welfare for the elderly
n	897	56	50	162	70	168	144	143	104
No particular problem	16.2	23.2	22.0	21.6	15.7	15.5	15.3	11.9	9.6
Difficult to clarify the required skills	12.6	10.7	14.0	8.0	10.0	11.3	15.3	17.5	13.5
Difficult to communicate the required skills to employees	8.0	7.1	8.0	9.9	15.7	4.8	8.3	7.0	6.7
Lack of employee motivation	18.5	14.3	6.0	28.4	25.7	14.3	21.5	13.3	16.3
Little time for employees to receive training	49.1	28.6	42.0	35.2	21.4	59.5	52.8	58.7	68.3
Employees quit jobs soon after acquiring adequate skills	17.9	16.1	16.0	11.1	37.1	12.5	18.8	11.2	34.6
Not aware of what training institutions are located where	3.1	0.0	6.0	3.7	7.1	3.6	3.5	2.1	0.0
Lack of training institutions providing adequate training programs	7.6	8.9	18.0	4.3	4.3	11.9	5.6	7.0	5.8
Costing much to use external training institutions	25.0	14.3	24.0	14.8	25.7	26.2	27.1	37.1	25.0
Not aware of how to apply for national subsidies for training/ application procedures are complex	6.7	3.6	16.0	6.8	7.1	3.6	6.3	9.1	5й. 8.
Other	1.9	8.9	0.0	1.2	5.7	0.6	0.7	2.8	0.0
No reply	6.4	7.1	6.0	10.5	11.4	5.4	4.2	4.9	2.9

IV. Clarification of Required Skills and Training

1. Clarification of Required Skills

The circumstances companies are faced with are changing considerably, as exemplified by the intensifying competition, changing industrial structures, and the ongoing IT revolution, as well as the rebuilding of business strategies and restructuring of internal control systems pursued by companies to cope with these changes. In a situation such as this, quickly developing and retaining personnel capable of adapting themselves to new business strategies and internal control systems is essential to achieving corporate growth. Most likely, the key to quickly developing and retaining such personnel will be clarifying as much as possible the skills required of personnel who will be the wellspring of corporate competitiveness and implementing education and training suited to the development of such skills.⁵ This section will look at how companies in the service industry are implementing activities related to the clarification of the required skills and how such activities affect the implementation and results of employee education and training.

In response to a question asking companies about how advanced they were in clarifying the skills required of employees engaging in the principal job roles that were mentioned in the previous section, 72.0% said they were either well advanced or somewhat advanced in doing so. As indicated by this result, companies are fairly confident about their efforts to clarify the required skills. Clarification is well advanced particularly in the hair dressing, cram school, funeral service, and civil engineering and construction sectors (Table 5).

Broadly speaking, there are two ways whereby companies inform their employees of the required skills: one is informing all employees of the required skills in general and the other is informing individual employees of the specific skills required of them. In the former, which is used to publicize the skills required by the company from the long-term perspective, using oral means of top-down communication, such as communication at a meeting or in a small group (56.5%) and at routine morning assemblies (32.4%), are more popular than using written means of communication, such as specifying the skills in the job description statement (8.8%), disclosing them as part of the personnel management and salary systems (12.5%) and communicating them via in-house LAN (8.2%) and via circulars and other documents (9.1%). Employees receive individualized information mainly to clarify the skills required at the moment through communication during routine work (65.4%) and through OJT (28.8%).

The mix of means of communication used to inform employees of the required skills vary from business sector to business sector. In the social welfare for the elderly sector, a greater variety of means of communication is used than in other sectors. Communication at

⁵ For the importance of clarification of various management-related resources, including human resources, and skills related to the implementation of management activities, refer to Endo (2005), Koyama (2009), Matsui, Ishitani, Sakuma, and Kojima (2009) and Nagao (2009).

	n	Well advanced in clarifying	Somewhat advanced in clarifying	Neither advanced nor lagging in clarifying	Lagging somewhat in clarifying	Lagging in clarifying	No reply
All respondents	897	28.1	43.9	13.6	10.5	2.1	1.8
Cram school management	50	40.0	32.0	12.0	14.0	2.0	0.0
Building services	144	20.8	45.1	15.3	14.6	4.2	0.0
Car mechanics	162	22.8	48.1	16.0	10.5	1.2	1.2
Information services	143	23.1	44.8	18.2	10.5	1.4	2.1
Funeral services	56	37.5	35.7	12.5	7.1	5.4	1.8
Civil engineering & construction	168	31.0	44.0	10.7	11.3	0.6	2.4
Hair dressing	70	50.0	38.6	4.3	4.3	0.0	2.9
Social welfare for the elderly	104	23.1	48.1	13.5	7.7	3.8	3.8

Table 5. The Degree of Clarification of the Skills Required of Employees Engaging in
the Principal Job Roles (%)

a meeting or in a small group is the most popular means in the hair dressing sector and routine morning assemblies are frequently used in the car mechanics sector. In the information services sector, in-house LAN, OJT, job description statements, and disclosure as part of the personnel management and salary systems are favored. Use of circulars and other documents, disclosure as part of the personnel management and salary systems, and informal communication are popular in the cram school sector, while communication during routine work is favored in the civil engineering and construction sectors (Table 6).

What kinds of companies are well advanced in clarifying the required skills? Presumably, there are two reasons why a company clarifies these. One is that informing employees of the required skills while accurately identifying the skills they have acquired is essential to implementing education and training effectively and efficiently. The other reason is that it is important to form the optimal career for each employee by appropriately matching the employer and the employee, or the job and the worker.

Having set independent and dependent variables based on the above thesis, we will identify the characteristics of companies that are well advanced in clarifying the required

	All respondents _m	Cram school management	Building services	Car mechanics	Information services	Funeral services	Civil engineering & construction	Hair dressing	Social welfare for the elderly
n	897	50	144	162	143	56	168	70	104
At a meeting or in a small group	56.5	60.0	53.5	43.2	58.7	53.6	53.6	64.3	77.9
At routine morning meetings	32.4	18.0	25.0	54.3	11.2	41.1	22.0	51.4	44.2
Via internal LAN	8.2	12.0	5.6	1.2	18.9	7.1	7.1	5.7	10.6
Via circulars and other documents	9.1	14.0	9.0	5.6	5.6	5.4	6.5	7.1	25.0
During routine work	65.4	64.0	67.4	65.4	62.2	66.1	69.69	58.6	65.4
Through OJT	28.8	36.0	30.6	9.3	39.2	25.0	24.4	20.0	53.8
Job description statement	8.8	6.0	7.6	3.1	11.9	3.6	6.0	10.0	23.1
Disclosure as part of personnel mamagement and salary systems	12.5	24.0	4.9	2.5	25.9	5.4	8 .3	20.0	20.2
Informal communication	15.1	22.0	14.6	9.9	16.1	16.1	13.1	12.9	23.1
Other	3.1	2.0	5.6	1.9	3.5	3.6	4.2	0.0	1.9
Not taking any particular step to communicate	3.9	10.0	4.9	1.9	5.6	1.8	3.0	4.3	2.9
No reply	1.0	0.0	0.0	1.2	0.0	1.8	1.2	4.3	1.0

skills by using the ordinal logistic regression analysis model. The dependent variables used in this model are represented as points awarded according to the replies given by the respondent companies in response to questions regarding the clarification of the required skills. Meanwhile, independent variables were set on the basis of the replies to two questions. One of the questions, related to activities to inform employees of the required skills, asked the companies whether they have a mechanism to assess employee performance and reflect it in the their treatment of employees, while the other, related to activities to identify the skills acquired by employees, asked the companies what types of information they collect and sort regarding individual employees. Independent variables related to the formation of optimal careers for the companies' employees were also set on the basis of the replies to two questions. One of them asked the companies whether they require employees engaging in the principal job roles to have formal job qualifications (meaning qualifications that workers who engage in specified jobs must obtain), and the other asked them how useful employees engaging in the principal job roles would be if employed by other companies of a similar size in the same business sector.

In addition to the above independent and dependent variables, we set control variables that represent business sectors, the size of the workforces of companies deemed to be influencing the clarification of the required skills and employer companies' self-assessments of the quality of regular employees compared with those at other companies of a similar size in the same sector.⁶

Table 7 shows the results of our analysis. The results indicate, first, that companies that assess the performance of their employees and reflect this assessment in their treatment are more advanced in clarifying the required skills than others and, second, that companies that have identified the business departments and roles in which the employees have experience, their training records, and their status of self-development efforts, are more advanced in the clarification. Third, companies that require employees engaging in the principal job roles to have formal job qualifications are more advanced – by a statistically significant margin—than other companies in clarifying the required skills. Fourth, companies whose employees with skills that would be sufficiently useful to other companies of a similar size in the same business sector are more advanced in the clarification.

Even if other factors are controlled, it is obvious from the above results that companies which inform their employees of the required skills, try to identify the skills acquired by their employees, and seek to form the optimal career for employees by appropriately matching them with jobs, are well advanced in clarifying the required skills.

⁶ Self-assessment was adopted as a control variable because companies that give high marks to the quality of their own regular employees are considered to be well advanced in skills development, indicating that the intensity of skills development activities and the degree of clarification of the required skills are correlated with each other.

	Co-efficient	Standard error
Industry		
(Civil engineering & construction used as a reference group)		
Cram school management	0.172	0.333
Building services	-0.446	0.236 +
Car mechanics	-0.364	0.224
Information services	-0.380	0.245
Funeral services	0.021	0.330
Hair dressing	0.812	0.309 **
Social welfare for the elderly	-0.345	0.253
Number of employees	0.000	0.000
Quality of regular employees	0.261	0.086 **
Collecting and sorting information concerning individual employ	yees	
Records of experience before joining the company	0.108	0.169
Business departments experienced in the past	0.401	0.151 **
Records of training	0.377	0.186 *
Status of self-development efforts	0.487	0.212 *
Certification	-0.189	0.173
Presence of requirement for formal job qualifications	0.423	0.159 **
Usefulness of employees with adequate skills	0.356	0.094 **
Assessment of employee performance and its reflection in em-	0.005	0 1 (2 **
ployee treatment	0.885	0.163 **
-2LL	2076.129	
Second power of χ	149.468**	
NagelkerkeR ²	0.185	

Table 7.	Which Sectors'	Companies Are	Well Advanced in	Clarifying the Required
	Skills? (ordinal	logistic regressi	on analysis model,	, N=795)

**p<.01, *p<.05, +p<.10.

- *Notes*: 1. The dependent variable is how advanced the companies are in clarifying the skills required for employees engaging in the principal job role, with five points awarded to companies well advanced in the clarification, four points to companies somewhat advanced, three points to companies neither advanced nor lagging in the clarification, two points to companies somewhat lagging and one point to companies lagging.
 - 2. The figure representing the "number of employees" is directly used as a variable for each of the respondent companies.
 - 3. The "quality of regular employees" represents a company's assessment of its own employees compared with the quality of those at other companies of a similar size in the same business sector. Five points were awarded to companies that recognized the quality of employees as superior, four points to those that recognized it as somewhat superior, three points to those that recognized it as somewhat superior, three points to those that recognized it as somewhat inferior and one point to those that recognized it as inferior.
 - 4. "How useful employees with sufficient skills would be to other companies" represents the company's assessment of such usefulness for employees engaging in the company's principal job role. Five points were awarded to companies that recognized their employees as useful, four points to those that recognized them as somewhat useful, three points to those that recognized them neither as useful or useless, two points to those that recognized them as rather useless and one point to those that recognized them as completely useless.
 - 5. All variables other than those indicated in above 1 to 4 are dummy variables, with "1" assigned to companies that fit the description of the variables and "0" to those that did not.

2. Degree of Clarification and Human Resources Development

Corporate education and training is an investment made in human resources in order to secure employee skills for the immediate moment or for the future. Generally speaking, this investment has three stages: the input stage, which relates to the amount of resources to be deployed, the processing stage, which relates to how the deployed resources are used in order to achieve a goal, and the output stage, in which the results are assessed. This applies to education and training, as well.⁷ This report will examine whether the degree of clarification of the required skills affects the three stages of education and training.

Input, which is generated by the resources deployed for investment, is indicated by four benchmarks related to human, physical, and financial resources and information. The benchmark related to human resources indicates the status of the organization responsible for education and training. Specifically, it may indicate the presence or absence of a department or staff dedicated to education and training. The benchmark related to physical resources indicates the status of educational materials, equipment, and facilities used for education and training. For example, it may indicate the presence or absence of seminar houses, training centers, and training materials and equipment. The benchmark related to financial resources indicates the amount of expenses for education and training, and the benchmark related to information indicates, for example, the status of the planning of education and training programs and the collection of information concerning training materials. How much a company should deploy the above four resources is closely related to its basic strategy for education and training and its basic policy to be implemented based this strategy.

First, we will look at the correlation between a company's policy on education and training and how advanced it is in clarifying the required skills (Table 8). This table shows that many of the companies that are well advanced in clarifying the required skills have implemented skills development programs while considering what kind of personnel will become necessary for business activities in which they may be engaging several years later. On the other hand, in most cases, companies that lag behind in clarifying the required skills have not set any particular policies for human resources development, or, although they have set such policies, they implement skills necessary for performing their current jobs. This suggests that stragglers in the clarification are focusing on developing skills necessary for the immediate moment and have little spare capacity for developing skills that may be required in the future.

As for the correlation between the clarification of the required skills and input related to education and training, the ratios of companies that have personnel responsible for

⁷ For the details of the approach of regarding education and training as investment activities comprised of three stages, and the elements of each stage which we will mention later, refer to Fujinami (2003).

	All respondents	Well advanced in clarification	Somewhat advanced in clarification	Neither advanced nor lagging	Somewhat lagging in clarification
n	897	252	394	122	113
Policies for training and skills development					
Implementing skills development while considering what personnel will be necessary for future business activities	11.6	21.0	11.2	3.3	2.7
Implementing skills development so as to enhance existing personnel's skills	38.1	41.7	39.8	41.0	23.0
Implementing skills development to help individual employees acquire skills necessary for performing their current jobs	25.0	25.4	24.6	23.0	28.3
Set no particular policy for training and skills development	19.7	8.7	19.0	27.9	39.8
No reply	5.6	3.2	5.3	4.9	6.2
Status of input related to education and training					
Securing budget funds each year	12.7	17.1	11.4	9.8	10.6
Appointed personnel responsible for planning	12.4	17.5	11.9	10.7	5.3
Having training materials and equipment in place	7.4	11.1	6.3	4.9	5.3
Collecting information concerning training materials and programs	26.1	31.7	27.7	21.3	14.2

 Table 8. Clarification of the Required Skills and Input Related to Education and Training (%)

planning off-JT programs, those that have training materials, equipment and facilities for off-JT in place, and those that collect information concerning training materials and programs are high among companies that are active in clarifying the required skills. There is a tendency that the more a company has clarified the required skills, the more resources it deploys to develop human and physical capital and collect information. Moreover, the ratio of companies that allocate budget funds to the deployment of resources for skills development each year is high among companies that are active in clarifying the required skills. From this, we may presume that the clarification of the required skills promotes financial investment as well as the deployment of human and physical capital and the collection of information.

	All	Well advanced	Somewhat advanced	Neither advanced	Somewhat lagging
	respondents	in clarification	in clarification	nor lagging	in clarification
n	897	252	394	122	113
OJT-related activities					
Implementing training and skills development according to a plan under a designated leader	48.3	67.9	49.0	33.6	21.2
Using work process manuals for training and skills development	37.5	54.0	37.1	24.6	18.6
Taking care to ensure a transition from easy to difficult work	69.9	74.1	72.1	63.1	67.3
Requiring employees to experience related jobs on a rotation basis	43.5	48.0	46.4	31.2	38.9
Holding employee seminars and meetings for presenting proposals	41.0	57.6	39.6	25.5	27.4

Table 9. Cl	arification	of Required	Skills and	OJT-Related	Activities	(%)
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Note: The above percentages represent the combined percentages of companies implementing the activities vigorously and those implementing them somewhat vigorously.

Next, we will look at the correlation between the degree of clarification of the required skills and the process of education and training. The process of education and training is comprised of six elements: (i) Who: Who implements education and training? (Who are the trainers and teachers?); (ii) When: When are education and training?); (iii) Where: Which institutions implement education and training?; (iv) For Whom: Who is educated and trained? (Who are the trainees?); (v) What: What kind of education and training is implemented? Specifically what are the priorities of education and training? (What are the contents of education and training programs?); (vi) How: How are education and training inglemented? (What is the method of education and training?). This report focuses on the correlation between the method of education and training—OJT in particular—and the clarification of the required skills.

As is indicated in Table 9, companies well advanced in clarifying the required skills are also active in implementing OJT programs, particularly those that take a significant amount of time and money, such as programs implemented according to a plan under a designated leader, programs using work process manuals, and employee seminars and meetings for presenting proposals.

While it would be possible to examine the results of education and training implemented by companies from various viewpoints, this section will focus on the correlation

	All respondents		Somewhat advanced in clarification	Neither advanced nor lagging	Somewhat lagging in clarification	Lagging in clarification
n	897	252	394	122	94	19
Improvement in workplace productivity	53.1	63.1	54.6	45.9	41.5	15.8
Increased ease of hiring activities	15.7	22.0	14.3	13.9	9.5	0.0
Rise in employee retention rate	31.2	40.4	32.2	18.9	24.5	10.5
Improvement in employee motivation	51.1	60.4	54.1	36.9	41.5	21.1
Improvement in workplace human relationships	29.2	38.9	27.9	23.7	21.3	5.3
Improvement in customer satisfaction	53.2	63.1	52.8	46.7	46.8	21.1

Table 10. Clarification of the Required Skills and Benefits of Education and Training (%)

Note: The above figures represent the combined percentages of companies that recognized significant benefits and those that recognized some benefits.

between the degree of clarification of the required skills and how companies assess the benefits of education and training in terms of (i) improvement in workplace productivity, (ii) increased ease of hiring activities, (iii) a rise in the employee retention rate, (iv) improvement in employee motivation, (v) improvement in workplace human relationships, and (vi) improvement in customer satisfaction.

Table 10 shows that companies well advanced in clarifying the required skills recognized significant benefits of education and training in terms of improvement in customer satisfaction, in workplace productivity, in employee motivation, and in workplace human relationships. In light of these survey results together with the results of the analysis of the input and process stages of education and training, we may presume that the more companies are advanced in clarifying the required skills, the more active they are in making an investment in the input and process stages and the greater benefits they reap from education and training.

V. Professional Certification and Human Resources Development

In the service industry, there are numerous professional certifications that may be obtained by individual employees. Professional certification is useful for companies in that it helps to select personnel out of the labor market in a rational and efficient manner and in that it promotes training of employees when employees are encouraged to obtain certification (Agata 2010). How are companies in the service industry making use of professional

	Number of initiatives actively implemented in the workplace	Number of Off-JT and self-development support initiatives implemented
Is a formal job qualification required?		
Required	2.63	1.49
Not required	2.22	1.25
Are employees ordered to obtain some manner of certification as a part of their job duties?		
Yes	2.78	2.25
No	2.35	1.24
Are employees encouraged to obtain some manner of certification before attaining a certain position?		
Yes	2.90	2.01
No	2.29	1.21
Are employees encouraged to obtain some manner of certification for self-development?		
Yes	2.70	1.86
No	2.30	1.18

 Table 11. Use of Certifications as a Benchmark and the Number of Education and Training Initiatives Implemented

certification in implementing human resources development?

This report will first look at how companies are treating professional certification in terms of whether they require employees engaging in the principal job roles to have formal job qualifications and whether they use any certification as a benchmark for skills development and career formation. Regarding whether the companies use any certification as a benchmark for skills development and career formation, the survey asked three more detailed questions: (i) whether the companies order employees to obtain any certification as a part of their job duties, (ii) whether the companies encourage employees to obtain any certifications frequently cited in response to the questions (i) to (iii) were common to all or two of the three, indicating that the same certification is used as a benchmark in different ways at different companies.

Do the differences in the requirement for formal job qualifications and the presence or absence of any certification being used as a benchmark for skills development and career formation affect the implementation of education and training? To find the answer, we looked at how active companies using certifications as a benchmark are in implementing routine education and training in the workplace, in implementing off-JT, and in supporting self-development efforts (Table 11). On average, companies that require formal job qualifications implement more education and training initiatives than those do not require it, while companies that order employees to obtain certification as a part of their job duties and those that encourage employees to obtain some manner of certification before attaining a certain position implement more education and training initiatives than companies that do not. These differences are statistically significant. As for off-JT and support for self-development efforts, companies that require employees engaging in the principal job roles to have formal job qualifications and those that use certification as a benchmark for skills development and career formation implement more education and training initiatives on average than companies that do not. These results indicate that requiring employees engaging in the principal job roles to have formal job qualifications and using some manner of certification as a benchmark for skills development and career formation may lead to active implementation of education and training.

Is there any correlation between actively implementing education and training and requiring employees engaging in the principal job roles to have formal job qualifications or using some manner of certification as a benchmark for skills development and career formation even if such factors as business sector, company size, and business performance are controlled or if the difference in the degree of willingness to hire regular employees, which could considerably affect the implementation of education and training, is controlled? Table 12 indicates the results of a multiple regression analysis using the intensity of routine education and training activities in the workplace as a dependent variable, and Table 13 shows the results of a multiple regression analysis using the strength of support for Off-JT and self-development efforts as a dependent variable. These analyses revealed that the dependent variables have a statistically significant positive correlation with requiring employees engaging in the principal job roles to have formal job qualifications and using some manner of certification as a benchmark for skills development and career formation. It can be said that requiring employees engaging in the principal job roles to have formal job qualifications or using some manner of certification as a benchmark for skills development and career formation promote corporate education and training.

Table 12. Correlation between the Intensity of Training and Skills Develop	pment
(multiple regression analysis)	

	β	t-ratio
Formal job qualification is required	0.120	2.639**
Employees are ordered to obtain some manner of certification as		
a part of their jobs		
Employees are encouraged to obtain some manner of		
certification before attaining a certain position		
Employees are encouraged to obtain some manner of		
certification for self-development		
Industry (Reference group: Cram school management)		
Building services	0.097	1.470
Car mechanics	0.004	0.050
Information services	0.034	0.493
Funeral services	0.092	1.755 +
Civil engineering & construction	0.085	1.106
Hair dressing	0.224	3.820 ***
Social welfare for the elderly	0.193	3.096**
Number of employees (Reference group: five to nine employees)		
10-29	-0.009	-0.187
30-49	0.025	0.584
50-99	0.070	1.529
100 and more	0.024	0.458
More than half of the workers engaging in the principal job roles	0.009	0.204
are non-regular employees	0.009	0.204
Sales trend in the past three years	0.080	2.121*
Willingness to hire regular employees	0.114	2.803 **
Constant		3.778***
\mathbb{R}^2	0.136	
Adjusted R ²	0.117	
N	6	82

***p<.001, **p<.01, *p<.05 +p<.10.

Notes: 1. Companies that employ four workers or fewer were excluded from the analysis.

- 2. In each of the models, the dependent variable is the intensity of human resources development activities in the workplace (the number of training and skills development initiatives actively implemented in the workplace).
- 3. In "willingness to hire regular employees," two points were awarded to companies that invited applications for the position of regular employee from both new graduates and mid-career workers, one point to companies that invited applications for the position of regular employee from either new graduates or mid-career workers, and no points were awarded to companies that did not invite applications for the position of regular employee from either new graduates or mid-career workers.

β	t-ratio	β	t-ratio	β	t-ratio		
0.090	2.455*						
0.090	2.133						
		0.122	3.271 **				
				0.067	1.753+		
0.107	1.621	0.104	1.584	0.109	1.648		
0.055	0.746	0.053	0.723	0.061	0.826		
0.037	0.528	0.029	0.421	0.022	0.308		
0.093	1.781 +	0.089	1.706 +	0.089	1.701 +		
0.127	1.695 +	0.102	1.351	0.113	1.490		
0.276	5.049 ***	0.280	5.141 ***	0.279	5.086***		
0.228	3.729***	0.208	3.396**	0.210	3.382**		
-0.018	-0.370	-0.017	-0.356	-0.018	-0.367		
0.011	0.248	0.017	0.390	0.017	0.396		
0.061	1.328	0.066	1.450	0.066	1.438		
0.018	0.345	0.006	0.121	0.018	0.350		
0.002	0.037	-0.001	-0.017	0.003	0.079		
0.080	2.105*	0.081	2.143*	0.071	1.845+		
0.109	2.674 **	0.101	2.487*	0.108	2.642**		
	3.931 ***		4.002 ***		4.045 ***		
0.	0.135		0.141		0.131		
0.	0.115		5 0.122 0.112		0.122		112
6	682		82	682			

Activities in the Workplace and the Use of Certifications as a Benchmark

4. In "sales trend in the past three years," five points were awarded to companies that recorded a sales increase, four points to companies that recorded a slight increase, three points to companies whose sales remained unchanged, two points to companies that recorded a slight decline and one point to companies that recorded a decline.

5. All variables other than those indicated in above 3 and 4 are dummy variables, with "1" assigned to companies that fit the description of the variables and "0" to those that did not.

	β	t-ratio
Formal job qualification is required	0.161	3.628 ***
Employees are ordered to obtain some manner of certification as a part of their jobs		
Employees are encouraged to obtain some manner of certification before attaining a certain position		
Employees are encouraged to obtain some manner of certification for self-development		
Industry (Reference group: Cram school management)		
Building services	0.111	1.734+
Car mechanics	0.131	1.746 +
Information services	0.226	3.345**
Funeral services	0.028	0.560
Civil engineering & construction	0.165	2.205*
Hair dressing	0.096	1.689 +
Social welfare for the elderly	0.171	2.825 **
Number of employees (Reference group: five to nine employees)		
10-29	0.021	0.452
30-49	0.104	2.469*
50-99	0.211	4.752***
100 and more	0.289	5.685 ***
More than half of the workers engaging in the principal job roles are non-regular employees	0.006	0.149
Sales trend in the past three years	0.060	1.633
Willingness to hire regular employees	0.097	2.457 **
Constant		-0.388
R ²	0.186	
Adjusted R ²	0.168	
N	6	82

Table 13. Correlation between the Strength of Support for Off-JT and
(multiple regression analysis)

***p<.001, **p<.01, *p<.05 +p<.10.

Note: The subjects of the analysis and the treatment of variables are the same as in Table 12.

β	t-ratio	β	t-ratio	β	t-ratio
0.247	7.125 ***				
		0.194	5.406***		
				0.180	4.905 ***
0.110	1.771+	0.117	1.854+	0.116	1.832+
0.180	2.599*	0.193	2.732**	0.197	2.787**
0.237	3.601 ***	0.219	3.275 **	0.196	2.909**
0.029	0.580	0.023	0.465	0.018	0.364
0.214	3.014**	0.179	2.472*	0.176	2.416*
0.161	3.124**	0.171	3.271 **	0.168	3.202**
0.217	3.760***	0.185	3.149**	0.169	2.836**
0.003	0.058	0.009	0.202	0.003	0.068
0.075	1.827+	0.093	2.226*	0.093	2.222*
0.187	4.294***	0.205	4.669**	0.201	4.542***
0.273	5.500***	0.261	5.166**	0.274	5.416***
0.000	0.012	-0.006	-0.154	0.005	0.126
0.062	1.727+	0.062	1.696+	0.037	1.003
0.088	2.302*	0.077	1.982*	0.086	2.189*
	-0.292		-0.115		0.064
0.1	0.229 0.205 (0.1	199	
0.	0.212		187	0.181	
6	682		82	682	

Self-Development Efforts and the Use of Certifications as a Benchmark

VI. Conclusion

Above, we examined the status of human resources development in the service industry and companies' initiatives that could affect human resources development based on the results of the analysis of a survey. Our analysis made it clear that the means of training and skills development targeted at core personnel differ from business sector to business sector in the service industry. It is also evident that companies that are well advanced in clarifying the skills required of core personnel are also actively involved in the input and process stages of education and training and that such active involvement may make education and training more effective in various ways. The analyses also revealed that companies that require employees engaging in the principal job roles to have formal job qualifications or that use some manner of certification as a benchmark for skills development and career formation are more active in implementing education and training than those that do not. Moreover, companies that require employees engaging in the principal job roles to have formal of core personnel qualifications tend to be more advanced in clarifying the skills required of core personnel than those that do not.

In light of the results of our analyses, what should be done in order to promote human resources development in the service industry? First, it will be necessary for industry organizations that well understand the status of corporate management and manpower to lead activities to develop and popularize qualifications that suit the circumstances and to implement measures to support those activities, given that the presence of various certifications other than formal job qualifications that are regarded by companies as essential to career formation and improvement in job performance may lead to active implementation of a variety of skills development initiatives by them.

When small and medium-size companies in the service industry implement education and training activities in an effective and efficient manner, the clarification of the required skills plays a significant role, and use of professional certifications as a benchmark makes no small contributions to the clarification. In light of this, the establishment of standards that may be used across the boundaries of companies for assessing effective professional skills will be important from the viewpoint of promoting human resources development at companies.

References

Agata, Kenji. 2010. Shokugyo shikaku no koyo wo do toraeruka [How should we recognize the utility of professional certification in Japan?]. The Japanese Journal of Labour Studies 52, no. 1:20-27.

Endo, Isao. 2005. Mieruka [Clarification]. Tokyo: Toyo Keizai Shinposha.

Fujimoto, Makoto. 2010. "Chusho sabisugyo ni okeru jinzai ikusei, noryoku kaihatsu" ni kansuru anketo chosa no gaiyo [Key points of the survey on human resources devel-

opment at small and medium-size companies in the service industry]. In *Chusho sabi-sugyo ni okeru jinzai ikusei, noryoku kaihatsu: Kigyo, jugyoin anketo chosa* [Human resources development at small and medium-size companies in the service industry: A survey on companies and employees]. JILPT Research Series no. 74, the Japan Institute for Labour Policy and Training, Tokyo.

- Fujinami, Miho. 2003. Henka suru jinzai ikusei seisaku [Changing policy for human resources development]. In *Ko to soshiki no seika shugi* [Performance-based assessment of individuals and organizations], ed. Koichiro Imano. Tokyo: Chuo Keizaisha.
- The Japan Institute for Labour Policy and Training, ed. 2010. *Chusho sabisugyo ni okeru jinzai ikusei, noryoku kaihatsu: Kigyo, jugyoin anketo chosa* [Human resources development at small and medium-size companies in the service industry: A survey on companies and employees]. JILPT Research Series no. 74, the Japan Institute for Labour Policy and Training, Tokyo.
- The Japan Institute of Labour, ed. 1997. *Sabisugyo no keiei kakushin to jugyoin fukushi* [Management innovation in the service industry and employee wellbeing]. JIL Research Report no. 92, The Japan Institute of Labour, Tokyo.
- Koyama, Noboru. 2009. *Keieino mieruka* [Clarification of management]. Tokyo: Chukei Shuppan.
- Matsui, Junichi, Shingo Ishitani, Yoko Sakuma, and Mika Kojima. 2009. *Shigoto no mieruka 99 no shikake* [99 ideas for the clarification of jobs]. Tokyo: Nippon Noritsu Kyokai Manejimento Senta.
- Nagao, Kazuhiro. 2009. *Shigoto no mieruka* [Clarification of jobs]. Tokyo: Chukei Shuppan.
- Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare, ed. 2003. *Sabisugyo shugyo jittai chosha* (Survey on Employment Conditions in Service). http://www.mhlw.go.jp/toukei/itiran/roudou/koyou/sangyo/02/index.html (accessed December 10, 2010).