Working Hours and Japanese Employment Practices

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I. Introduction

It is a well known fact that the Japanese have long working hours throughout what we consider developed countries. Moreover, the already long working hours have further increased in recent years. This trend is more visible particularly among male workers between their late 20s and early 40s, the most productive years. The ratio of individuals working 60 hours or more a week in 1994 was 17%-19%, yet by 2004 it had jumped to 20%-24%. Incidentally, the working hours in this survey based on the Labor Force Survey (Ministry of Health, Labour and Welfare 2004, 2005) include unpaid overtime, since individual workers comprised the respondent base for the survey questionnaires.

This paper introduces Japanese employment practices in relation to the various aspects of working hours.

II. Unpaid Overtime

Government statistics do not reveal the status of unpaid overtime. Therefore, the Japan Institute for Labour Policy and Training conducted a survey on this issue in 2005 under the author's guidance. Predominantly, this paper will introduce the analysis and results of this survey (hereafter referred to as the "JILPT Survey"), which focuses on fulltime regular employees employed in business and other firms (The Japan Institute for Labour Policy and Training 2006, Ogura and Fujimoto 2006).

1. Main Features

Table 1 shows the average length of unpaid overtime classified by gender, age group, job type and title. The average unpaid overtime for the 1,004 respondents was 13.5 hours, although this also includes individuals who never work unpaid overtime. Of the 1,004 respondents, 53% worked "0 hours" of unpaid overtime. Excluding such data, the average unpaid overtime for individuals who had worked at least one hour of unpaid overtime was 28.6 hours. The fact that those working unpaid overtime account for 47% of total

Table 1. One-month (June 2005) unpaid overtime and ratios (%) classified by attributions (No. 1)

	N	0 hour	1-39 hours	40-79 hours	80 hours or more	Total	Average (including 0 hour)	Average (excluding 0 hour)
Total	1,004	53.0	33.3	9.9	3.9	100.0	13.5	28.6
Gender								
Male	662	52.4	32.2	10.4	5.0	100.0	15.2	31.9
Female	342	54.1	35.4	8.8	1.8	100.0	10.2	22.2
Age								
20s	139	56.8	28.8	10.1	4.3	100.0	13.2	30.5
30s	417	51.3	34.1	10.1	4.6	100.0	14.6	30.0
40s	328	51.8	33.2	11.3	3.7	100.0	13.5	28.1
50s	120	57.5	35.8	5.0	1.7	100.0	9.7	22.8
Job type								
General affairs, human resources, accounting, etc.	94	54.3	34.0	10.6	1.1	100.0	10.4	22.8
General clerical work, reception or secretarial work	125	61.6	35.2	2.4	0.8	100.0	6.9	17.9
Business and sales	149	30.9	38.3	19.5	11.4	100.0	28.2	40.7
Customer service	49	69.4	24.5	4.1	2.0	100.0	6.9	22.5
Business professionals specializing in survey analysis, patents, legal affairs, etc.	15	46.7	40.0	13.3	0.0	100.0	13.5	25.4
Technical professionals specializing in R&D, design, SE, etc.	127	59.1	32.3	5.5	3.1	100.0	10.6	26.0
Medical and educational professionals	151	34.4	41.7	17.2	6.6	100.0	20.3	30.9
Workplace management or supervision	52	53.8	34.6	9.6	1.9	100.0	13.6	29.4
Manufacturing, production or construction industry operations	130	80.0	16.9	1.5	1.5	100.0	3.9	19.5
Transportation or vehicle operation	45	51.1	33.3	13.3	2.2	100.0	14.3	29.3
Security or sanitation	10	50.0	40.0	0.0	10.0	100.0	11.3	22.6
Title								
General staff	683	56.2	31.8	8.6	3.4	100.0	11.9	27.3
Sub-division manager or supervisor	321	46.1	36.4	12.5	5.0	100.0	16.7	31.0

Note: Based on a JILPT Survey. Excluding non-respondents and others.

respondents is a significant problem.

This suggests that for those working at least one hour of unpaid overtime, approximately 29 hours of overtime allowances go unpaid each month. Multiplying this monthly unpaid overtime by 12 months amounts to 348 hours

a year. Take, for example, an overtime allowance of 2,000 yen an hour. That would amount to approximately 700,000 yen of unpaid overtime allowances each year.

What types of workers tend to work unpaid overtime? According to the average unpaid overtime worked by individuals who have put in at least one hour of unpaid overtime, as indicated in Table 1, the average unpaid overtime for male and female workers is 31.9 and 22.2 hours respectively. This indicates that male workers accumulate longer hours of unpaid overtime than their female counterparts. The distribution by age group shows the unpaid overtime for those in their 20s, 30s, 40s and 50s to be 30.5, 30.0, 28.1, and 22.8 hours respectively, indicating that younger workers accumulate the most unpaid overtime. Job types with longer unpaid overtime include business and sales, whose workers have the longest unpaid overtime by far at 40.7 hours. This is approximately 10 hours longer than the second highest unpaid overtime of medical and educational professionals (30.9 hours). In the case of business and sales workers, a fixed overtime allowance may affect the above figure.

According to analysis by industry as shown in Table 2, industries with long hours of unpaid overtime include the construction industry (34.8 hours), wholesale and retail industries (34.1 hours), finance, insurance and real estate industries (32.8 hours) and the service industry (36.0 hours). In the construction industry, construction work not advancing as scheduled due to unexpected weather changes or the like may cause daily working hours to turn into unpaid overtime. In the wholesale and retail industries as well as the service industry, working days or hours are likely to be fixed according to customer convenience, which also may result in lengthy unpaid overtime.

According to analysis of the working hour system, the average unpaid overtime for discretionary work is 38.4 hours, approximately 8 hours longer than the 30.2 hours averaged in the general working hour system. As defined in the Labor Standards Act, with discretionary work, hours are set at 8 or less per day and customary work exclusive of late-night shifts, is unpaid. Many professionals as well as business and sales workers are employed under this system, which instead of requiring long working hours, demands great outcomes. Essentially, these individuals are forced to work longer hours in order to achieve the expected outcome.

Table 2. One-month (June 2005) unpaid overtime and ratios (%) classified by attributions (No.2)

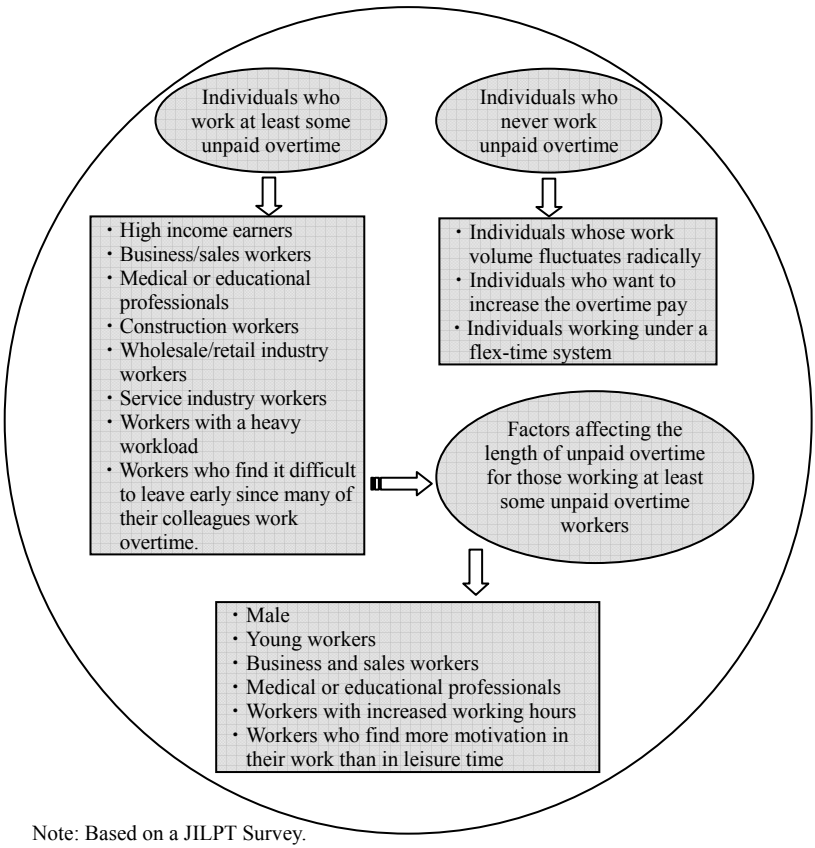
	N	0 hour	Less than 80 hours	Less than 100 hours	100 hours or more	Total	Average (including 0 hour)	Average (excluding 0 hour)
Total	1,004	53.0	33.3	9.9	3.9	100.0	13.5	28.6
Industry								
Construction	70	52.9	31.4	8.6	7.1	100.0	16.4	34.8
Manufacturing	217	70.5	20.7	6.0	2.8	100.0	8.7	29.7
Electricity, gas, water and heat supply	21	57.1	33.3	9.5	0.0	100.0	7.4	17.2
Information communications	53	64.2	30.2	5.7	0.0	100.0	7.2	20.2
Transportation	43	55.8	34.9	7.0	2.3	100.0	10.6	23.9
Wholesale and retail	99	39.4	37.4	17.2	6.1	100.0	20.7	34.1
Finance, insurance and real estate	61	47.5	31.1	14.8	6.6	100.0	17.2	32.8
Medicine and social welfare	109	46.8	46.8	6.4	0.0	100.0	8.3	15.6
Services	191	44.5	34.0	14.7	6.8	100.0	20.0	36.0
Government	110	46.4	41.8	9.1	2.7	100.0	12.6	23.4
Working hour system								
General working hour system	713	51.3	33.0	11.6	4.1	100.0	14.7	30.2
Flex time	96	69.8	22.9	5.2	2.1	100.0	8.2	27.2
Irregular working hour system	45	42.2	44.4	8.9	4.4	100.0	15.0	25.9
Time shift system	112	60.7	34.8	2.7	1.8	100.0	6.0	15.4
Reduced working hours for child care, etc.	9	33.3	55.6	11.1	0.0	100.0	13.0	19.5
Discretionary work	29	31.0	44.8	10.3	13.8	100.0	26.5	38.4
Annual income								
1 to less than 3 million yen	212	61.3	27.4	8.0	3.3	100.0	10.9	28.1
3 to less than 5 million yen	374	54.5	32.9	9.4	3.2	100.0	12.4	27.2
5 to less than 7 million yen	262	48.9	36.3	10.3	4.6	100.0	14.4	28.2
7 to less than 10 million yen	130	40.0	40.0	13.8	6.2	100.0	19.8	33.0
10 to less than 20 million yen	5	80.0	20.0	0.0	0.0	100.0	5.4	27.0

Note: Based on a JILPT Survey. Excluding non-respondents and others.

2. Quantitative Analysis

The results of a quantitative analysis of factors affecting unpaid overtime are introduced below (Figure 1). The basis for this form of analysis is the fact that examining the issue of unpaid overtime from a single angle would preclude consideration of additional behind the scenes attributes. Suppose, for instance, that the amount of unpaid overtime for business and sales workers is longer than for general clerical workers. In this case, the nature of the work can be considered a significant factor affecting the phenomenon. The “nature of the

Figure 1. Factors affecting unpaid overtime (N=771)



Note: Based on a JILPT Survey.

work" for business and sales often implies a working hour system that is designed to accommodate customer convenience, often compelling individuals to work nights and holidays, or one with previously fixed allowances for overtime work. However, in order to definitively confirm whether or not the nature of the work affects unpaid overtime, we must first rule out the influence of a range of factors. If we were to examine the issue of unpaid overtime without removing any gender-related influences, especially in the case of business and sales where the majority of workers are male, and with general clerical work were the majority of workers are female, we would be unable to pinpoint accurate differences between the two job types. Therefore, in the quantitative analysis, we treat gender as the explanatory variable, rule out any

effects of gender disparity, and finally verify whether or not there is any difference between business and sales work and general clerical work. If we conclude that the unpaid overtime of business and sales workers is longer than that of general clerical workers, after having considered the nature of the work and barring the effects of not only gender differences but also various additional factors, then we can deal fairly accurately with the nature of business and sales work in the analysis.

This paper reveals the analysis results of the JILPT Survey regarding the influence of explanatory variables (factors) such as gender, age, annual income, job type, industry, working hour system, the trend of rising working hours, work or free-time orientation and reasons for working overtime on the presence or absence of unpaid overtime as well as on the length thereof.

In terms of unpaid overtime, as mentioned above there are different types of workers: individuals who never work unpaid overtime, those who work at least some unpaid overtime, and those who have accumulated a great deal of unpaid overtime. Therefore, the Heckman selection model, which is suitable for analyzing this type of data, was utilized. The model first divides workers into two groups: those who never work unpaid overtime (group 0) and those who work at least some unpaid overtime (group 1). The factors affecting their unpaid overtime were then investigated (first phase), followed by the factors affecting the length of unpaid overtime accrued by those working at least some unpaid overtime (second phase). Sophisticated research papers would naturally describe meticulous parameters and standard errors; however, this paper will not describe statistical analyses in detail, but show the author's analysis results through imagery to impact a greater audience (Incidentally, this paper will only examine results that are statistically significant at or above the 5% level).

First, let us take a look at the results of the first phase estimates located in the upper quadrant of Figure 1, indicating "those who work at least some unpaid overtime" and "those who never work unpaid overtime."

These results represent the actual status of many workplaces in Japan. Higher income earners tend to put in longer hours of unpaid overtime. Since they work unpaid overtime, their overtime pay is forfeited regardless of how many hours are worked. There is arguably a psychological factor for such actions among high income earners, namely the enterprising spirit they have regarding their work. In this respect, the analysis results presented here are consistent with those obtained by Takahashi (2005).

Unpaid overtime seems likely to exist in business and sales, the medical and educational professions, as well as in the construction, wholesale/retail and service industries. In some business firms, overtime pay is prescribed as a "fixed amount" and any overtime exceeding the fixed amount of hours is forfeit (this may be illegal). Also, in some cases, it appears to be difficult to apply for overtime pay. Furthermore, with the effect of a performance-based appraisal system, the tendency is for working hours to rise without compensation. The fact that workers with "high work volumes" work unpaid overtime is likely due to the effects of this performance-based appraisal system. Interestingly, those who find it difficult to leave their workplace early since many of their colleagues work overtime have a tendency to work unpaid overtime. This is otherwise known as "*tsukiai* overtime" (a Japanese word meaning to keep pace with other colleagues in order to maintain good relationships). One may infer that these individuals find it difficult to apply for overtime pay since their overtime is associated with *tsukiai*.

Three factors were detected among "those who never work unpaid overtime." Individuals who replied that their work volume fluctuates radically were most likely to have the full amount of their overtime pay rewarded when they worked long hours of overtime during their company's busy seasons. Although some companies may be unable to provide overtime pay if they are busy year-round, most companies pay the full amount of overtime pay for the overtime hours worked during the busy seasons. Those wishing to increase their overtime pay never work unpaid overtime. To an extent, this is only natural. For these individuals, working unpaid overtime is nonsense. More interestingly, many of those who work under a flex-time system also never work unpaid overtime. This can almost certainly be attributed to the fact that these workers accurately manage their working hours. As you may know, under a flex-time system workers are given the flexibility to select their daily start and finish times for work, excluding a certain core time. Their selected times, however, must undergo final adjustments, including ensuring a 40-hour work week. This system cannot be put into practice unless companies are able to keep track of such times objectively and accurately using time cards or ID cards. That is why flex-time workers do not work for unpaid overtime unlike other workers. This is an important key to eliminating unpaid overtime.

As readers of this paper, you may be aware of the problematic implications of looking solely at the results of "whether to work at least some unpaid

overtime or none at all." While there appears to be an aspect of "self-motivation" involved, with high income earners working more unpaid overtime, the opposite is also true for workers forced to work unpaid overtime due to extended overtime hours attributable to a high work volume. One may argue that business and sales workers are also forced to work unpaid overtime due to "large work volume," and sometimes "volunteer" to put in unpaid overtime. To avoid misunderstanding, the author wishes to add that he does not maintain a positive opinion of unpaid overtime. However, at first glance, it appears that a percentage of unpaid overtime is done voluntarily. Needless to say, a performance-based appraisal system plays an undeniable role, encouraging workers to voluntarily work unpaid overtime. Sill, another reason may be the renowned industrious nature of Japanese workers. Despite this nature, however, any work ethic injurious to a worker's health or private life warrants modification.

Next, let us take a look at those "factors affecting the length of unpaid overtime accrued by individuals working at least some unpaid overtime," as indicated in the lower quadrant of Figure 1. Several factors were discovered including male workers, young workers, business and sales workers, medical and educational professionals, workers whose hours have increased over the previous year, and workers who find more motivation in their work than in their leisure time. Among those who work at least some unpaid overtime, male workers in their 20s and 30s work more unpaid overtime than their female counterparts and more than any other age group. This group is followed by business and sales workers and medical and educational professionals, indicating that among the various job types, the aforementioned workers can safely be labeled as the typical individual working unpaid overtime. In addition, in cases where working hours increased over the previous year, the increase most likely developed into unpaid overtime.

The analysis results further reveal that workers who find more motivation in their work than in their leisure time tend to work longer hours of unpaid overtime. As introduced above, this also indicates that there are some regular fulltime employees in Japan who voluntarily work unpaid overtime. However, there seems to be a difference of interpretation regarding the comparison between those who work at least some unpaid overtime and those who never work unpaid overtime.

This is because high income has an effect on "those who work at least some unpaid overtime" but no effect on "the length of unpaid overtime accrued

by individuals working at least some unpaid overtime." The former case was explained above as the enterprising spirit of Japanese workers. In this respect, the same interpretation is applicable to workers who find greater motivation in their work. Unfortunately, however, income has no effect on the length of unpaid overtime. Namely, higher income earners do not always put in more hours of unpaid overtime. For those who find motivation in their work, this motivation is partly directed toward working unpaid overtime. However, it cannot be said that income is associated with the length of unpaid overtime. What might you, the reader, make of such results?

Forgive the rendering of such a complicated account, but these results on unpaid overtime in particular are quite the reality. One should not go so far as to say that all Japanese workers dislike unpaid overtime, but on the same token it is highly unlikely that all of them voluntarily work unpaid overtime. The survey results support this hypothesis. Needless to say, it would nonsense to hold either a "0 or 1" discussion on such a topic.

Many Japanese feel that since they have to work anyway, it would be better for them to enjoy working than not. However, the analysis results indicate that the length of unpaid overtime worked voluntarily has no correlation to level of income.

III. Reasons for Overtime

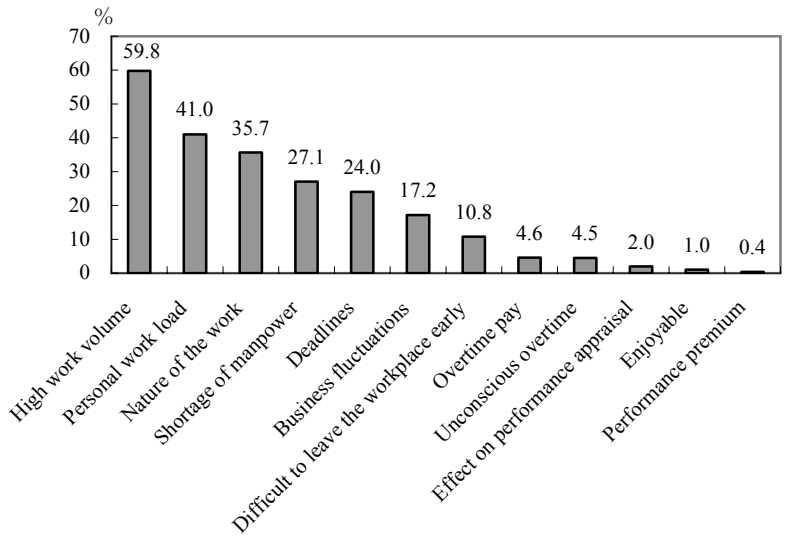
1. Reasons for Overtime Are Limited

Why do the Japanese work overtime? According to general opinion, it is "because they want overtime pay," "it is not easy to leave work since other colleagues are working overtime," "because they enjoy being at work," and "because they have low productivity."

In the JILPT Survey, individuals who had worked overtime were asked to indicate their reasons for doing so. First, refer to Figure 2.

This data represents the various reasons why individuals working overtime chose to do so. They were given the option of selecting up to 3 of 12 alternatives as their reasons for working overtime. The total of the percentages thus exceeds 100%.

Figure 2. Reasons for working overtime (multiple responses N=1,049)



Notes: 1 Based on a JILPT Survey.
2 This survey applies only to individuals who indicated having worked unpaid overtime "often" or "sometimes."
3 Respondents were given up to 3 alternative responses. One alternative was "other reasons," but this alternative was removed from Figure 2.

The highest ratio of total respondents at 59.8% indicated work volume as the cause, saying "I have more work than can be completed within regular working hours" (hereafter referred to as "high work volume"). The second highest ratio at 41.0% indicated, "I want to complete my work neatly and accurately" (hereafter referred to as "personal work load"). These two responses total 100%. Therefore, it appears as if "busy workers" account for 60% and "work enthusiasts" account for 40%. However, since this survey is based on multiple responses, there are additional reasons for working overtime.

The third highest ratio of total respondents at 35.7% stated, "because of the nature of my work, I am unable to complete it within regular working hours" (hereafter referred to as "nature of the work"), followed by 27.1% of total respondents claiming to work overtime "because of manpower shortages resulting from recent downsizing" (hereafter referred to as "shortage of manpower") and 24.0% of total respondents saying it is "because I have to

meet deadlines to maintain a good relationship with clients" (hereafter referred to as "deadlines"). Finally, 17% claimed to work overtime "due to significant seasonal fluctuations in business" (hereafter referred to as "business fluctuations"). These reasons indicate that individuals are forced to work overtime due to company circumstances or workload.

According to general opinion, "because they want overtime pay" and "because they enjoy being at work" are raised as reasons why individuals work overtime. However, the fact is that only 4.6% and 1% of total respondents selected the reasons, "because I want to increase overtime pay and holiday work allowances" (hereafter collectively referred to as "overtime pay") and "because it is more enjoyable to stay at work than to leave at the end of the day" (hereafter referred to as "enjoyable") respectively. Reasons also include "because it is difficult to leave early since my boss and colleagues work overtime" (hereafter referred to as "difficult to leave the workplace early"). However, this only covers 10.8% of respondents. Likewise, the number of those working overtime out of "personal convenience" is substantially lower than for those working overtime out of convenience for their work or company. Reasons for working overtime do not appear to be so much varied as considerably limited.

2. Various Characteristics of Reasons for Working Overtime

Below is an introduction of the characteristics of several reasons for working overtime.

When looking at "high work volume," the differences between job types become clear. The ratios (response ratios) of those who selected this reason are listed in descending order by profession. Technical professionals for R&D, designing, systems engineers, etc. accounted for 75.8%, medical and educational professionals followed at 69.3%, with business professionals specializing in survey analysis, patents, legal affairs, etc. coming in at 66.7%. These job types can be grouped as "professional." These professionals work overtime due to high work volume. As for the working hour system, the ratio of responses from those doing discretionary work was the highest at 75.9%. The discretionary work system is the working hour system that applies predominantly to professionals.

Among the various job types, security/cleaning had the lowest response ratio at 25%, followed by customer service at 42.5%. This indicates that

security and cleaning jobs are completed more or less within prescribed working hours, whereas professional work is not. The biggest difference between security/cleaning and professional work is whether or not the job is routine. Needless to say, security and cleaning jobs may or may not be routine, as this depends on the modus operandi. However, it seems to be the case that this type of work is completed within prescribed working hours when operations are run according to the books and provided no unexpected disturbances occur. On the other hand, in the case of professional work, there is a low percentage of routine jobs among total operations. The volume of professional work varies significantly depending on the procedure implemented and the content of the work. Moreover, as many are aware, it is often difficult to pinpoint the "completion of a job," namely deciding how neatly and accurately the work must be done.

Also in the case of professional work, work volume can fluctuate. Once professionals finish more intricate jobs, they take a body and brain break before beginning another job. In the long term, without such a cycle they would eventually reach a point of both physical and mental exhaustion. However, recent trends indicate that the work volume for Japanese professionals is not only not decreasing but increasing. In many companies, personal treatment and benefits for professionals are based on a performance-based appraisal system. Since the 1990s, this system has gradually been adopted by Japanese companies, placing greater importance on "volume on top of quality" than ever before. When the performance-based appraisal system was initially introduced, companies would accept (comparatively) "lower" results than in recent years. However, it appears that some professionals are being forced to set objectives twice as high as in previous years owing to claims by their superiors such as, "Seeing as how you achieved your objectives last year, you can certainly set higher ones this year." Of course, these professionals do undergo personal growth, and may not feel that quantitatively doubling their objective would result in twice the work in light of their increased ability. Nevertheless, it is far more difficult to double one's ability level than double one's objective. Furthermore, this trend is visible not only among professionals, but likely extends to all white-color workers as well.

A variety of educational backgrounds are present among those who indicated "personal work load," the second highest of all responses, as their reason for working overtime: middle and high school graduates (34.4%), 2-year college

and technical school graduates (41.0%) and 4-year university and postgraduates (45.4%). Distribution by age group reveals that the older the respondent the higher the response ratio. The ratio for individuals in their 20s was 37.3%, for those in their 30s it was 38.9%, and for those in their 40s and 50s it was 43.2% and 44.1% respectively. According to job type, general affairs, human resources, and accounting show the highest response ratio (53.8%), followed by medical and educational professionals (48.2%), general clerical workers, receptionists, and secretaries (45.7%), business and sales workers (44.9%) and technical professionals specializing in R&D, design or SE (41.6%).

Response ratios varied more so by job type in the case of "personal work load" than with "high work volume." This reason was selected primarily by professionals, but in the case of "personal work load," those considered white-color workers, such as individuals working in general affairs, human resources and accounting, general clerical work, and receptionists and secretaries indicated significantly higher response ratios. This can be understood to occur not because white-color workers have less work, but because they have a stronger drive to "complete their work neatly and accurately" than professionals, since the work is their own. Furthermore, the higher the age group the higher the response ratio for "personal work load." This is in correlation with professional titles as well; namely, general staff (38.1%), sub-division managers and supervisors (40.5%), assistant managers (47.5%) and the general managerial class (56.4%). Compared to "high work volume," the correlation with total working hours is relatively weak. The correlation coefficient for "high work volume" and total working hours is 0.23, while only 0.04 for total working hours and "personal work load."

The third-ranked "nature of the work," exhibits a trend similar to "personal work load" in terms of age group and title. As for age group, the older the age group, the higher the response ratio: 28.2% for respondents in their 20s, 34.5% for respondents in their 30s, and 37.5% and 39.9% for respondents in their 40s and 50s respectively. The trend also shows similarities with respect to title: 32.9% were general staff, 35.3% were sub-division managers and supervisors, 43.3% were assistant managers and 45.5% were part of the general managerial class. This may indicate that higher-ranked workers must work outside of regular working hours to complete work that they alone are capable of accomplishing. The general perception is that the chief responsibility of managerial workers is to instruct their staff members, manage work progress

and occasionally offer assistance. In addition to this, however, many managerial workers have their own personal work load not involving their staff members. The analysis results indicate that they are forced to do such work outside of normal working hours.

The distribution of response ratios by job type are: workplace supervisors (45.7%), medical and educational professionals (43.1%) and business and sales workers (42.9%). Upon examination by industry, the service industry (47.4%) and electricity, gas, water and heat supply industries (47.1%) show the highest response ratios of all. Individuals working in these industries must work outside of normal working hours to accommodate customer requests, etc.

In the case of 4th-ranked "shortage of manpower," a certain correlation is visible between the response ratio and the number of employees working in a company. In general, the greater the number of employees, the higher the response ratio. Companies with less than 30 employees had a response ratio of 23.0%, 30 to less than 100 had a ratio of 21.7%, 100 to less than 300 comprised 27.7%, 300 to less than 1,000 had a ratio of 28.4%, 1,000 to less than 3,000 reached 31.3% and 3,000 or more had a response ratio upwards of 31.3%. Comparatively speaking, workers in companies with larger employee populations had a tendency to select "shortage of manpower."

Let us also confirm some trends related to less common responses. In the case of "unconscious overtime," for which the total response ratio was only 4.5%, young workers and general staff showed higher response ratios: respondents in their 20s comprised 10.0% of the total, those in their 30s comprised 4.4%, those in their 40s and 50s comprised 3.6% and 2.8% respectively. General staff indicated a ratio of 5.1%, sub-division managers and supervisors 4.9%, assistant managers 2.1% and the general managerial class 1.8%. The initially assumption was that managerial workers and older age groups would be the ones affirming the reason, "inefficient employment practices lead to unconscious overtime" owing to frequent mention in mass media of unconscious overtime by company presidents. However, according to the general opinion of full-time regular employees in Japan, there is a stronger awareness of unconscious overtime among general staff and workers in their 20s. Reading too much into this trend is risky. Although managerial and general staff workers commonly consider work procedures inefficient, what in particular these two groups deem inefficient may differ. Currently, the author's perspective lies somewhere in between the two groups, with the belief that

some managerial workers may be frustrated with young workers who to them appear to lack know-how and work inefficiently without first consulting their superiors. On the other hand, some young workers are frustrated with the procedures employed by managerial workers who lack insight into the latest technologies and still tirelessly enjoy holding long meetings.

The total response ratio of another less common response, "overtime pay," was 4.6%. This varied by educational background, age, annual income and job type. Starting with educational background, the response ratio of middle and high school graduates was the highest (7.4%), followed by 4-year university and postgraduates (3.3%) and 2-year college and technical school graduates (3.1%). The response ratio distributed by age group is 2.7% for respondents in their 20s, 5.4% for those in their 30s, 4.4% for those in their 40s and 4.2% for those in their 50s, with the highest response ratio from those in their 30s. The distribution by annual income group shows 1 to less than 3 million yen at 6.7%, 3 to less than 5 million yen at 5.2%, 5 to less than 7 million yen at 4.4% and 7 to less than 10 million yen at 3.2%. This indicates that comparatively lower income earners showed a higher response ratio. Moreover, looking at the distribution by job type, we see a response ratio of 14.3% from those in transportation and driving and 10.6% for those in manufacturing, production and construction work. These figures surpassed general clerical work, reception and secretarial work (5.7%), business and sales work (2.0%) and technical professionals specializing in R&D, design and SE, etc. (6.0%). These figures indicate that those designating "overtime pay" as a reason for working overtime are mainly blue-color workers in their 30s with middle or high school educations and relatively low annual incomes.

In fact, analysis of response ratios for "overtime pay" in terms of whether respondents had any debts, including house loans, revealed no clear differences. This may imply that despite a large outstanding loan balance, dependence is not placed on overtime pay as the loan balance is considered an insignificant amount of money and overtime pay is exceedingly variable.

The total response ratio for "difficult to leave the workplace early" was 10.8%. Young workers and general staff workers clearly showed higher response ratios; namely, 20.9% for those in their 20s, 12.2% for those in their 30s, 8.8% for those in their 40s and 4.2% for those in their 50s. Distribution by title indicated general staff at 12.9%, sub-division managers and supervisors at 10.7%, assistant managers at 4.3% and the general managerial class at 7.3%. It

Table 3. Lifestyles in relation to length of total working hours (%)

	N	I do	I think so	I don't think so	I don't	Total
Avoid overeating and eat balanced meals						
Total	1,362	14.5	40.9	35.2	9.4	100.0
i. 120 - 160 hours	178	16.6	37.6	35.4	10.5	100.0
ii. 161 - less than 200 hours	549	14.7	42.6	35.9	6.7	100.0
iii. 200 - less than 240 hours	397	13.5	42.5	34.8	9.3	100.0
iv. 240 - 300 hours	238	14.2	36.8	33.9	15.1	100.0
Get sufficient rest						
Total	1,362	10.9	35.9	40.6	12.6	100.0
i. 120 - 160 hours	176	19.6	39.7	31.3	9.5	100.0
ii. 161 - less than 200 hours	549	11.8	40.3	37.6	10.3	100.0
iii. 200 - less than 240 hours	397	7.8	35.0	44.8	12.5	100.0
iv. 240 - 300 hours	240	7.5	24.5	47.7	20.3	100.0
Exercise or participate in sports regularly						
Total	1,362	11.1	17.9	32.7	38.4	100.0
i. 120 - 160 hours	177	12.2	20.6	35.6	31.7	100.0
ii. 161 - less than 200 hours	549	14.3	17.6	31.9	36.1	100.0
iii. 200 - less than 240 hours	397	8.8	16.8	33.0	41.5	100.0
iv. 240 - 300 hours	239	6.7	18.3	31.7	43.3	100.0

Notes: 1 Based on a JILPT Survey and excluding non-respondents.
2 Total working hours refers to total working hours for the month of June 2005, including paid and unpaid overtime.

is slightly irregular for the response ratio of general managers to be higher than that of assistant managers. Essentially, young workers and general staff find it more difficult to leave their workplaces early since their bosses are working overtime.

IV. Working Hour and Lifestyle

The JILPT Survey investigated the adequacy levels of three components of daily life: eating, sleeping and exercising. Table 3 illustrates the survey results. The figures are indicated based on the length of total actual working time for the month of June 2005, including unpaid overtime.

In the category, "avoid overeating and eat balanced meals," the ratio of individuals who replied "I don't" was: (i) 10.5% for those working 120 to 160 hours, (ii) 6.7% for those working 161 to less than 200 hours, (iii) 9.3% for those working 200 to less than 240 hours and (iv) 15.1% for those working 240 to 300 hours.

In the category, "get sufficient rest," the ratios were: (i) 9.5%, (ii) 10.3%, (iii) 12.5%, and (iv) 20.3%, respectively. In this category, the differences were

more evident than in the category, "avoid overeating and eat balanced meals."

As for "exercise or participate in sports regularly," the ratios were: (i) 31.7%, (ii) 36.1%, (iii) 41.5%, and (iv) 43.3%, respectively. In this category, the differences in the ratios were not as evident as those in the category of "get sufficient rest," but showed slightly more apparent differences than in the category, "avoid overeating and eat balanced meals."

Therefore, upon examination of the relationship between working hours and the three components of daily life (eating, sleeping and exercising), long working hours appears to significantly affect sleep duration. In other words, the longer the working hours the more workers tended to cut down on their sleep.

Based on the "Survey on Time Use and Leisure Activities" conducted by the Ministry of Internal Affairs and Communications in 2001, the author investigated the average active hours for those working 35 or more hours a week. Analysis results showed the following breakdowns of sleep duration: 7 hours and 32 minutes, 7 hours and 33 minutes, 7 hours and 26 minutes, and 7 hours and 8 minutes for individuals working 35 to 39, 40 to 48, 49 to 59, and 60 plus hours each week respectively. It became evident that those working 60 or more hours a week sleep substantially fewer hours. Despite a disparity of only approximately 20 minutes, an average disparity of 20 minutes is quite significant. As expected, there is a clear and considerable trade-off between long working hours and hours of sleep.

V. Prospects

Do individuals putting in long hours have a stronger desire to switch companies or do they prefer to remain with their current companies indefinitely? The JILPT Survey investigated an individual's desires for future working conditions and indicated remarkable results regarding the relationship between these desires and working hours. See Table 4.

The total for each working hour category in Table 4 is 100%, as the respondents were asked to select only one of seven desires ranging from "I wish to gain experience in various company operations in order to join the ranks of management in the future" to "I have no particular desires and prefer to let matters take their course."

Table 4. Desire for future working conditions in relation to length of total working hours (%)

	120 to 160 hours	161 to less than 200 hours	200 to less than 240 hours	240 to 300 hours	Total
I wish to gain experience in various company operations in order to join the ranks of management in the future.	4.6	4.5	6.1	8.5	5.7
I desire a moderate promotion to management-level work.	6.4	8.4	8.4	9.3	8.3
I desire to continue working for my company until retirement age, regardless of promotion.	20.8	24.2	15.0	12.7	19.1
I desire to exercise my abilities in this company by utilizing my experience, expertise and qualifications.	15.0	14.5	17.9	15.7	15.7
I would consider changing companies if it would allow me to utilize my experience, qualifications, etc.	18.5	23.4	26.3	26.7	24.2
I desire to test my ability to run my own business.	2.9	3.9	3.7	3.4	3.6
I would change companies on a dime for a more favorable situation.	11.0	10.4	13.7	16.5	12.5
I have no particular desires and prefer to let matters take their course.	20.8	10.8	8.9	7.2	10.9
Total (N)	100 (N=173)	100 (N=538)	100 (N=380)	100 (N=236)	100 (N=1,327)

Note 1 and 2 are the same as in Table 3.

First, refer to the "Total," as it indicates not total working hours, but simply the order of future desires for all respondents. The table indicates that 24.2% of respondents selected "I would consider changing companies if it would allow me to utilize my experience, qualifications, etc," 19.1% selected "I desire to continue working for my company until retirement age, regardless of promotion," and 15.7% said "I desire to exercise my abilities in this company by utilizing my experience, expertise and qualifications."

By examining the different lengths of total working hours, we are able to see discrepancies in several categories. In the category "I wish to gain experience in various company operations in order to join the ranks of management in the future," response ratios were 4.6% for 120 to 160 hours, 4.5% for 161 to less than 200 hours, 6.1% for 200 to less than 240 hours, and 8.5% for 240 to 300 hours, indicating slightly higher response ratios for the two groups with the longest total working hours. Comparatively speaking, many individuals working

long hours are keenly motivated to continue working for their company in order to secure a top management position.

In the category "I desire to continue working for my company until retirement age, regardless of promotion," response ratios were 20.8% for 120 to 160 hours, 24.2% for 161 to less than 200 hours, 15.0% for 200 to less than 240 hours, and 12.7% for 240 to 300 hours, indicating slightly higher response ratios for the two groups with the shortest total working hours. These respondents consider it important to continue working in their present company even though many of them are among those with fewer total working hours.

In the category, "I would consider changing companies if it would allow me to utilize my experience, qualifications, etc.," response ratios were 18.5% for 120 to 160 hours, 23.4% for 161 to less than 200 hours, 26.3% for 200 to less than 240 hours, and 26.7% for 240 to 300 hours, indicating slightly higher response ratios for the groups with the longest total working hours. These respondents are eager to demonstrate their skills and qualifications in their current company or another company, focusing not on where they work but on the contents of their work. Although not a large discrepancy, only a relatively small number of respondents in this category were among those with comparatively short total working hours.

In the category, "I would change companies on a dime for a more favorable situation," response ratios indicated 11.0% for 120 to 160 hours, 10.4% for 161 to less than 200 hours, 13.7% for 200 to less than 240 hours, and 16.5% for 240 to 300 hours, indicating higher response ratios for the groups with the longest total working hours. One may speculate that a considerable number of individuals aspiring to switch companies feel they are overworked. This matter will be examined in further detail below.

In the category, "I have no particular desires and prefer to let matters take their course," response ratios indicated 20.8% for 120 to 160 hours, 10.8% for 161 to less than 200 hours, 8.9% for 200 to less than 240 hours, and 7.2% for 240 to 300 hours, indicating lower response ratios for the groups with the longest total working hours. This mater will also be addressed in further detail below.

The preconception that "individuals with long working hours tend to be eager to switch companies or remain with them in the hopes of securing a position in top management," appears to hold some water. On the other hand, the image that "individuals with short working hours desire to discreetly

continue working for their companies or have no apparent desires," also appears to ring true.

However, these images are no more than "partially true," since just under 5% of respondents wished to join the ranks of management in their company and little more than 10% aspired to switch companies as soon as possible despite relatively short working hours. On the contrary, despite relatively long total working hours, 12% to 15% of respondents desired to continue working for their present companies and 7% to 9% had no particular desires and preferred to let matters take their course.

Suppose that many people hold the same preconceptions mentioned above. Comparatively speaking, they may be influenced by the majority principle that individuals working long hours are "generally speaking" more eager to work fervently or change companies than those working short hours. This may be a problematic impression, but when considering it adversely, yet another scenario may arise.

Why is it that individuals with short working hours aspire to become top management? There may be no correlation between aspirations for a top management position and total working hours. Although a natural concept for most companies, working hours are not the sole factor in determining eligibility for promotion. There are certainly individuals who seldom work overtime, but maintain high performance levels and who have earned the trust and confidence of both their superiors and subordinates.

Furthermore, 10% of respondents with short working hours expressed a desire to change companies as soon as possible. This merely indicates that the relationship between the desire to change companies and total working hours is not one to one, but that many factors contribute to this desire, of which working hours is but one.

The perception that those with relatively short total working hours tend to let matters take their course is in accord with preconceptions. Conversely then, in what situation would an individual working long hours consider letting matters take their course? There are certainly workers so utterly physically and mentally exhausted from overwork that they are unable to plan for a bright future. It is also natural that working hours be merely one of the many factors in planning for a bright future. Those who desire to continue working in their company do so for various reasons including the company's future growth potential, personal treatment and benefits and family circumstances. There are

many factors a worker must consider when transferring to a new company, including the market value of their skills and expertise, the new work environment and a new living environment. These factors vary from one worker to the next. Therefore, should an individual find one of the various factors to be significantly more important than the rest, finding a solution thereto could significantly alter any desires for the future.

VI. Concluding Remarks

The highly accurate description of Japanese employment practices in the JILPT Survey is worthy of appreciation. The Japanese work so hard that the word *karoshi* (meaning death from overwork) is known throughout the world. It is irrefutable that the Japanese glorify the concept of hard work. Some people criticize Japanese workers, claiming they have low productivity. Although this point cannot be completely denied, at the same time, it is important to note that some workers are forced to work overtime on account of excessive work volume.

The length of working hours and employment practices vary depending on the situation surrounding the labor market, and are affected by a variety of factors including history, culture, customary practices, procedures and economic conditions. Likewise, it is meaningless to simply compare the length of working hours in different countries based on statistical data alone. However, it is also a fact that among economically advanced countries, Japan is where the greatest number of workers dies from overwork. This is one fact that merits greater awareness among Japanese people.

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