

Chapter 6

Gender Bias: What Has Changed for Female Academics?

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6.1 Introduction

The aim of this chapter is to trace how gender has changed teaching and research activities as well as interest in these activities in the Japanese academic female profession under the influence of social change and university reform in the past 15 years. Data from a 15-year period (1992–2007) were examined.

After the Imperial University was established in 1886, Japanese universities remained closed in access to university-level education for all but a very small number of women (see Fig. 6.1).

Although women were given the opportunity to enroll in higher education when the new university system was established, 60 years later after the end of WWII, in the academic disciplines of natural sciences, engineering, and agriculture, the proportion of females is still quite low (Kawano 2009) (Table 6.1). Furthermore, the proportion of female scientists in Japan is extremely low compared with the proportions in other countries (Kano 1988, 2007) (Fig. 6.2).

The International Women's Year in 1975 and the United Nations Decade for Women initiated in 1976 influenced Japanese gender issues, leading to the 1986 Equal Employment Opportunity Law for Men and Women and the 1999 Basic Act for a Gender-equal Society. The realization of gender equality in society is a vitally important issue for the twenty-first century. The Japanese government set a numerical target in 2007 to promote female participation in decision-making processes for policies and administrative measures, aiming for a 30 % participation rate by 2020. The Japan Association of National Universities issued a report entitled *Promotion of Gender Equality in Japanese National Universities*, which proposed a goal

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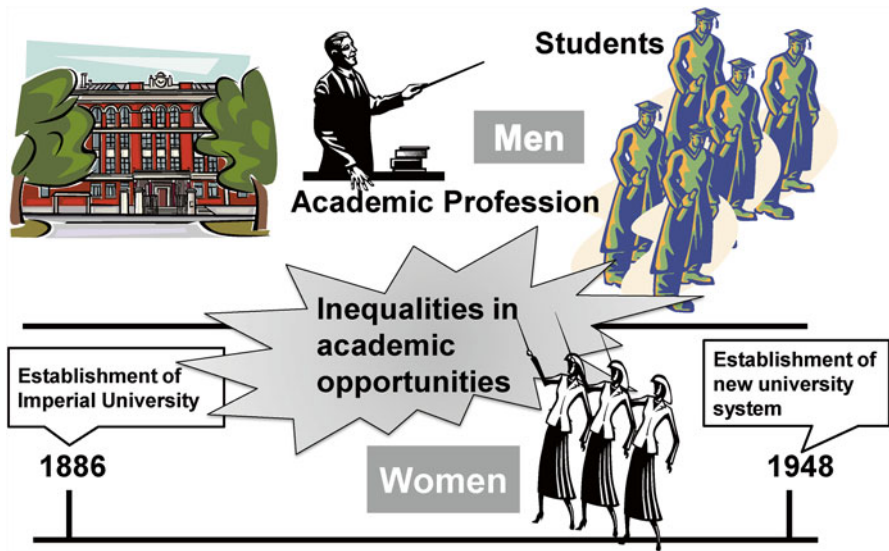


Fig. 6.1 The Japanese pre-war higher education system

Table 6.1 Proportion of female faculty in each academic discipline

Academic discipline	Proportion of female faculty (%)		
	Professor	Associate professor	Assistant professor
Humanities	18.8	30.5	42.1
Education	15.2	26.2	39.1
Social sciences	7.7	21.5	30.1
Natural sciences	4.0	6.6	15.9
Engineering	1.5	3.9	7.0
Agriculture	2.8	6.2	13.8
Health related sciences	17.3	21.3	27.8
Home economics	55.4	72.3	85.6
Arts	18.3	27.3	37.7

Source: MEXT (2009), School Basic Survey

wherein, by 2010, 20 % of academics (not including assistants) at national universities would be women. In addition, this report recommended establishing an open recruitment system to increase the number of women.

The careers of women in Japanese universities today are affected by two factors: policies for women related to the realization of a gender-equal society; and university reforms driven by globalization and changes in employment markets. Do these factors present benefits or disadvantages for women?

Using data from the responses of Japanese individuals in the academic profession to the 1992 and 2007 rounds of the International Survey of the Academic Profession, sponsored by the Carnegie Foundation for the Advancement of Teaching,

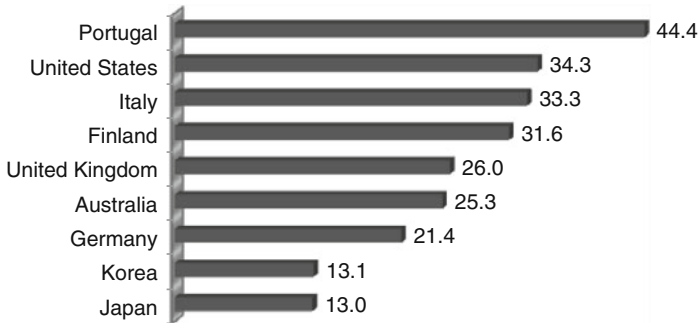


Fig. 6.2 Proportion of female scientists (%) (Source: Cabinet Office (2009), *White Paper on Gender Equality*)

changes over these 15 years were traced by gender. In this chapter, data on these professionals and reported time spent on, and interest in, teaching and research activities are analyzed. In addition, a gender-based comparison of working environment and evaluation of work is explored. Finally, an overview of female academics in the twenty-first century is provided.

6.2 Career and Professional Situation

According to the *School Basic Survey* (MEXT 2009), the proportion of female academics in Japanese Universities was 9.4 % in 1992 and 17.4 % in 2007. However, the proportion of female respondents to the Japanese survey was only 7.9 % in 1992 and 12.0 % in 2007. The low proportion of women in the survey makes it difficult to generalize results obtained by analyzing the data. However, the paucity of verifiable research based on the representation of women on research staff in higher education in Japan and the fact that research data has not been accumulated leaves us little choice but to use the data. The respondents are classified by pertinent factors in Table 6.2.

There were fewer respondents from private universities in 2007 than in 1992 and more from national universities. In particular, the proportion of women responding from national universities (18.4 % in 1992 and 35.1 % in 2007) increased by 16.7 percentage points, which was higher than the 13 percentage point increase for men (49.7 % in 1992 and 62.7 % in 2007).

All Japanese national universities were incorporated in April 2004, and the proportion of female respondents may have been influenced by this move. With regard to age, there was no change in the proportion of men between 1992 and 2007, with 10 % in their 30s or younger, about 30 % each in their 40s and 50s, and about 20 % in their 60s or older. There was also no significant change in the proportion of professors. On the other hand, the proportion of women in their 30s or younger increased by 10.1 percentage points (8.2 % in 1992 and 18.3 % in 2007), and the

Table 6.2 Career and professional situation of subjects

		(%)					
Item	Classification	1992			2007		
		Male	Female	Male	Female		
		N=1,725	N=147	N=966	N=131		
Institutional type	National university	49.7	18.4	***	62.7	35.1	***
	Private university	50.3	81.6		37.3	64.9	
Age	20–29	0.5	0.7	*	0.0	0.8	**
	30–39	9.8	8.2		10.0	18.3	
	40–49	33.7	24.5		29.7	24.4	
	50–59	33.9	41.4		34.0	33.6	
	60–69	19.6	25.2		25.2	22.9	
	70–	2.5	0.0		1.1	0.0	
	Average	51.3	52.0		52.2	50.4	
	Standard deviation	9.5	8.5		9.7	10.0	
Number of years the academic has belonged to an institution	–5	14.8	11.2	**	20.0	28.9	
	6–10	17.0	9.8		19.5	22.5	
	11–15	14.1	8.4		16.2	13.2	
	16–20	18.6	15.4		13.6	10.9	
	21–25	17.2	17.5		10.7	5.6	
	26–30	11.7	23.0		7.4	2.4	
	31–	6.6	14.7		12.6	16.5	
	Average	16.6	20.9		15.7	14.8	
Academic rank	Standard deviation	9.3	10.7		10.9	11.7	
	Professor	56.4	41.4	**	59.8	42.0	***
	Associate professor	33.7	42.7		31.3	33.6	
	Lecturer	9.5	15.9		8.5	24.4	
Academic discipline	Other	0.4	0.0		0.4	0.0	
	Humanities	14.7	15.6	***	11.2	14.6	***
	Social sciences	11.2	6.4		12.6	24.0	
	Science	19.7	2.8		18.9	6.9	
	Engineering	23.7	2.1		25.5	3.1	
	Agriculture	7.1	2.1		8.6	3.8	
	Biomedical sciences	13.6	12.8		15.2	20.0	
	Health sciences	0.1	0.0		0.2	1.5	
	Home economics	0.1	10.6		0.1	13.8	
	Teacher training	1.4	3.5		3.2	1.5	
	Arts	3.9	39.1		3.0	6.2	
	Physical sciences	3.3	4.3		0.7	1.5	
Degrees	Other	1.2	0.7		0.8	3.1	
	Doctoral degree	59.7	25.0	***	74.7	49.6	***
	Master's degree	24.3	31.6		18.1	36.6	
	First degree	15.2	38.3		6.6	13.0	
	Other	0.8	5.1		0.5	0.8	

Notes: * $p < .05$; ** $p < .01$; *** $p < .001$

proportion of women in their 50s or older decreased slightly, bringing the average age down by about 2 years. This change is also evident in the number of years spent at an institution. The average number of years for men has decreased by just 1 year since 1992. However, for women it decreased by 6.1 years, from 20.9 to 14.8. The proportion of female academics with under 5 years of service increased by 18.3 percentage points (11.2 % in 1992 and 28.9 % in 2007), those with 6–10 years of service increased by 12.7 percentage points (9.8 % in 1992 and 22.5 % in 2007), and those with 11–15 years of service increased by 4.8 percentage points (8.4 % in 1992 and 13.2 % in 2007). In summary, the proportion of female academics with 15 or fewer years of service was 29.4 % in 1992 but increased to 64.6 % by 2007. Two conclusions can be drawn. First, a large number of women became university academics between 1992 and 2007. Second, young female researchers possess a great interest in current teaching and research activities.

Was there any change in the proportion of men and women in academic subject areas? There was no change from the sciences being dominated by men, who occupy over 60 % of the positions. On the other hand, the proportion of women increased by 17.4 percentage points (6.4 % in 1992 and 24.0 % in 2007) in the social sciences, and by 7.2 percentage points (12.8 % in 1992 and 20.0 % in 2007) in the biomedical sciences. In contrast, the ratio of female academics in the arts declined by 32.8 percentage points (39.1 % in 1992 and 6.2 % in 2007). The mobility of women appears to be linked to social change arising from policies for women. With regard to doctoral degrees, a far higher proportion is held by men than by women, which may be linked to the higher number of men in the sciences; nevertheless, the proportion of women holding doctoral degrees has increased. This is due to the increase in female academic staff over the 15-year period (24.6 percentage points), which has greatly surpassed the increase in male staff (15.0 percentage points).

The following conclusions can be drawn from the classification of respondent data. (1) There were more responses from staff at national universities in 2007 than in 1992. There were almost twice as many female respondents compared with the previous survey (in 1992). From the increase in the number of respondents, it can be inferred that university reforms have had an impact on awareness and action among women. (2) There was little difference in age among men. However, there were fewer women over 50 and more in their 30s or younger. This reduced the average length of service by 6 years. In addition, there was a high degree of mobility in women. (3) The proportion of male professors was higher than that of female professors. However, the proportion of female lecturers was higher,

showing that women appear to be concentrated in lower-level positions. (4) There was no significant change in the proportion of men in different academic areas; however, there were more women in the social sciences and biomedical sciences. (5) More men than women held doctoral degrees. However, the proportion of women with doctorates has doubled over the 15-year period, and their academic position has improved.

In Japan, it has been pointed out that men hold a strong aspiration for research, and women are devoted to teaching activities. However, from the results of this classification of data regarding academics, it appears that there has been a change in

teaching and research activities as well as interest in the integration of these activities in female academics.

6.3 Teaching and Research Activities

Academics undertake work such as teaching (preparing instructional materials and lesson plans, providing classroom instruction, advising students, reading and evaluating student work), research (reading literature, writing, conducting experiments, doing fieldwork), social service (services to clients and/or patients, unpaid consulting, public or voluntary services), and administrative tasks (committee work, department meetings, paperwork). This study examined time reportedly devoted to teaching and research activities as well as interest in these activities by gender.

6.3.1 Hours Academics Spend on Each Activity (When Classes Are in Session)

Average hours spent on academic activities during 1 week when classes were in session are shown in Table 6.3. The average total time spent decreased by 1.9 h for men but increased by 1.1 h for women over the 15-year period. The time spent by women in social service, administrative tasks, and other academic activities increased; however, the time spent on research decreased. Female academics spent half as much time on research in 2007 (12.8 h) as they did on teaching (27.2 h). The teaching time for men did not change; however, women spent one additional hour teaching ($p < .001$).

Table 6.3 Hours per week worked in different activities

	(Hours)			
	1992		2007	
	Male	Female	Male	Female
Teaching	19.3	26.2	19.5	27.2
Research	21.9	17.4	17.3	12.8
Social service	3.5	2.1	4.1	3.4
Administration	6.0	4.7	7.7	6.8
Other academic activities	2.9	1.7	3.1	3.0
Total	53.6	52.1	51.7	53.2

Table 6.4 Do your interests lie primarily in teaching or in research?

			(%)	
	1992	***	2007	
	Male	Female	Male	Female
Teaching	25.9	47.1	31.1	41.6
Research	74.1	52.9	68.9	58.5

Notes: *** $p < .001$

Teaching = “Primarily teaching” and “In both, but leaning toward teaching”

Research = “Primarily research” and “In both, but leaning toward research”

6.3.2 Teaching–Research Nexus

It appears that women spend more hours teaching than men. Do academics have a preference for either teaching or research, and is there a gender difference? The answer to the question “Regarding your own preferences, do your interests lie primarily in teaching or in research?” are summarized in Table 6.4. In the 1992 survey, men showed a greater interest in research than did women ($p < .001$). However, the 2007 survey showed no significant difference in teaching interest. Both male and female remain more interested in research than teaching. A closer look at the 2007 results for women indicates that interest in research for those with 15 years of service or less (61.8 %) was 10.7 percentage points higher than those with longer periods of service (51.1 %). Furthermore, affirmative responses to “If I want tenure in my subject, I need to have more articles or papers published” increased by 7.8 percentage points for males (48.4 % in 1992 and 56.2 % in 2007) and by 15.1 percentage points (37.5 % in 1992 and 52.6 % in 2007) for females.

Young academics who are still building their careers have no choice but to be interested in research. Research activities are also linked to their evaluation as university academics. Eighty percent of academics agreed with the statement “Excellent research results are critical to an academic’s reputation” (men: 78.0 % in 1992 and 80.4 % in 2007; women: 74.6 % in 1992 and 79.4 % in 2007). University academics must not fail to realize that their own self-evaluation and reputation among colleagues is determined more than ever by research (Arimoto and Ehara 1996).

6.3.3 Research Activities

Academics in different disciplines use different methods to make public their research results. The graph in Fig. 6.3 illustrates the number of articles published in academic books or journals in the 3 years prior to the survey dates. The following three points are clear from an analysis of this data. First, most respondents, men or women, in the 3-year period published in the range 1–5 papers. Second, the number of female academics who have had no work published has decreased (29.3 % in

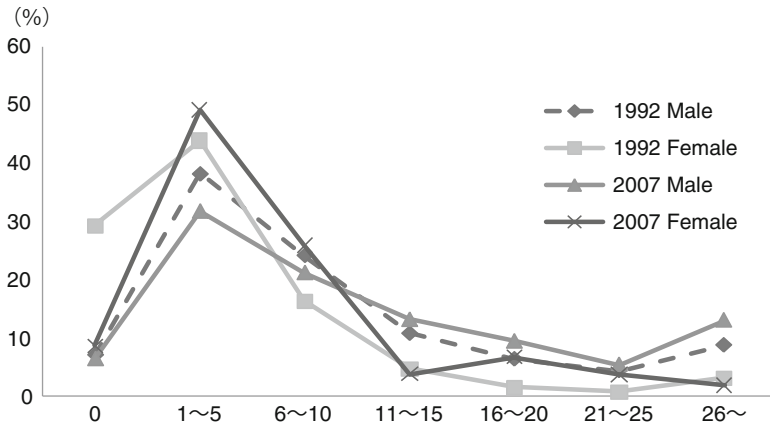


Fig. 6.3 Articles published in an academic book or journal in the 3 years prior to the survey dates in Japan

Table 6.5 Teaching activities

	(%)			
	1992	***	2007	***
	Male	Female	Male	Female
Undergraduate programs	34.7	68.1	13.3	43.1
Undergraduate programs & Master’s programs	62.6	30.5	82.6	55.4
Doctoral programs	2.0	1.4	2.5	0.8
Others	0.7	0.0	1.4	0.8

Note: *** $p < .001$

1992 and 8.7 % in 2007), and the amount of research has increased correspondingly. Third, men published more research results than women according to the 1992 and 2007 surveys ($p < .01$). Although it may vary depending on the subject area, men are considered to conduct joint as well as individual research. The lack of published research among women may well in part be the result of an inability to participate in an adequate research network.

6.3.4 Details of Teaching Activities

Full-time faculty members are required to teach both undergraduate and postgraduate courses. Teaching activities at the postgraduate level are dependent on an academic’s career and ability to conduct educational research. Table 6.5 shows the distribution of teaching responsibilities. Men were responsible for the greater proportion of undergraduate, masters’ and doctoral programs in both the 1992 and 2007 surveys ($p < .001$). Women were the majority in undergraduate-only programs. Postgraduate education also influences research activities. If postgraduate education

is linked to large-scale joint research, then female academics with fewer opportunities for higher-level education face greater difficulties in the integration of academic research with teaching compared with male colleagues.

In recent years, the burden placed on academics has increased due to the addition of first year teaching, remedial teaching, undergraduate teaching, and quality assurance. This effect is starting to show in private and non-research universities with a high proportion of female staff. One reason for women spending more time than men on academic activities could be that they have issues with their working environment. Incidentally, 64.1 % of women and 51.1 % of men answered the question “How much involvement have you had in faculty development activities in your institution in the last 3 years?” with “As much as possible” (a response option only in the 2007 survey); more men (32.2 %) than women (26.5 %) answered “Not very much”; the proportion of men who answered “Never” (14.7 %) was also higher than that of women (9.4 %; $p < .05$). Women show more enthusiasm for faculty development activities than men. However, unlike research results, teaching activities are difficult to evaluate. For example, men responded positively to “A better method is necessary for the evaluation of teaching abilities” (71.6 % in 1992 and 74.5 % in 2007; there were five levels of response, these numbers were for “Strongly Agree” and “Agree”), showing an increase of 2.9 percentage points. The positive response from women (65.9 % in 1992 and 75.4 % in 2007) showed an increase of 9.5 percentage points. Women, who spend more time on teaching activities than men, clearly expect more guidance through evaluation of their teaching.

This report has already discussed the greater passion expressed by female academics for teaching. However, a strong inclination to conduct research added to the desire to teach suggests a difficult situation for female academics. In short, women who consider both research and teaching important are under much more psychological stress than men.

6.4 The University as a Workplace

How do academics see universities in terms of an environment in which they conduct their teaching and research?

6.4.1 *Relative Importance of Academic and Institutional Affiliations*

Academics work within their own academic discipline, which gives meaning to their position at the university. The extent to which academics felt a sense of belonging within the university structure is shown in Table 6.6.

The number of academics who responded that they felt their academic discipline was “Very important” was the highest. The importance of other levels of university structures was substantially lower. In addition, positive responses were all lower in

Table 6.6 Relative importance of affiliations

			(%)	
	1992	***	2007	***
	Male	Female	Male	Female
My academic discipline	68.7	70.7	67.5	66.9
My course	55.6	55.2	51.8	39.7
My department (at this institution)	38.8	40.5	32.6	31.7
My faculty (at this institution)	29.3	36.2	24.0	22.6
My institution	30.6	37.5	22.5	25.2

Notes: ****p* < .001

Responses were on five-point scale with 1 = Very important and 5 = Not at all important. Numbers in the table show the proportion of “Very important” responses

Table 6.7 Evaluation of teaching and research environment

			(%)	
	1992	***	2007	***
	Male	Female	Male	Female
Interest and enthusiasm of teachers	33.7	38.5	38.5	36.9
Intellectual environment	31.3	35.4	37.3	31.5
Clarity of the university’s educational research objectives	28.1	36.2	31.3	30.6
Sense of community	27.0	29.9	23.5	20.7
Relationship between education and management	24.9	23.8	28.0	31.3

Notes: ****p* < .001

Responses were on five-point scale with 1 = “Very high” and 5 = “Very low.” Results in the table show the proportion of “Very high” and “High” responses

2007 than in 1992. This drop was sharper for women than for men. In other words, women’s sense of belonging to the university structure has become even weaker than that of men. This suggests that women, more than men, consider recent university reforms to be negative.

6.4.2 Evaluation of the University Environment and Requirements for Teaching and Research

The basic requirements for a teaching and research environment are facilities such as classrooms and laboratories, office space, teaching technology, research equipment and instruments, library services, professional relationships, and cultural aspects of the university. The physical and cultural factors that surround academics affect their ability and motivation to conduct teaching and research activities.

Responses from academics with regard to the teaching and research environment in their university are shown in Table 6.7. A comparison of the 1992 and 2007 survey responses from male academics reveals that their appraisal was higher than that of female academics for all categories except “Sense of community.” The highest

increase was 6.0 percentage points for “Intellectual environment” (31.3 % in 1992 and 37.3 % in 2007). However, the only category that saw an increase among women was “Relationship between education and management.”

The lowest-scoring category was “Sense of community,” which dropped by 3.5 percentage points for men (27 % in 1992 and 23.5 % in 2007) and 9.2 percentage points for women (29.9 % in 1992 and 20.7 % in 2007). Whereas men seemed to view changes in the teaching and research environment optimistically, women were more pessimistic.

How fulfilled or frustrated did academics feel in their institutional environments? Their responses to seven different categories are shown in Table 6.8. Satisfaction with “Classroom instruction/lecturing,” “Relationships with colleagues,” and “Job security” were higher among both men and women in 2007 than in 1992. Particularly, men showed an increase of 7.8 percentage points (53.6 % in 1992 and 61.4 % in 2007), and women showed an increase of 6.9 percentage points (61.1 % in 1992 and 68.0 % in 2007) for “Classroom instruction/lecturing.” By contrast, the three categories that showed a drop for both men and women were “Freedom in teaching and research,” “University management policies,” and “Overall satisfaction with your current job.” The category with the steepest drop in approval was “University management policies,” which dropped by 8.1 percentage points for men (30.1 % in 1992 and 22.0 % in 2007) and 12.2 percentage points for women (26.8 % in 1992 and

Table 6.8 How would you rate your overall satisfaction?

	(%)							
	1992				2007			
	Male		Female		Male		Female	
	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied	Satisfied	Dissatisfied
Classroom instruction/lecturing	53.6	10.9	61.1	11.6	61.4	8.7	68.0	11.8
Relationship with colleagues	51.3	10.2	51.4	13.4	57.1	10.3	61.0	10.7
Job security	62.3	6.0	65.7	11.5	63.2	8.9	67.9	9.9
Promotion prospects	34.6	16.2	29.9	27.3	25.9	16.4	29.3	15.6
Freedom in teaching and research	70.1	9.2	63.6	17.9	67.9	11.6	56.6	21.8
University management policies	30.1	27.4	26.8	34.1	22.0	35.7	14.6	39.7
Overall satisfaction with your current job	53.6	14.3	51.8	14.9	52.4	15.2	46.2	21.5

Notes: Responses were on five-point scale with 1 = “Very high” and 5 = “Very low.” In the table, the proportion who are “Satis(fied)” are those who responded “Very high” and “High”; “Dissatis(fied)” responded “Very low” and “Low”

Table 6.9 How do you evaluate your salary?

			(%)	
	1992	***	2007	*
	Male	Female	Male	Female
High	10.6	21.1	20.2	30.8
Low	45.2	26.8	31.3	23.1
Neither	44.2	52.1	48.5	46.1

Notes: * $p < .05$; *** $p < .001$

Responses were on five-point scale with 1 = "Very high" and 5 = "Very low." In the table, the proportion recorded as "High" are those who responded "Very high" and "high"; those recorded as "Low" responded "Very low" and "Low"

Table 6.10 My job is a source of considerable personal strain

			(%)	
	1992	***	2007	*
	Male	Female	Male	Female
Agree	54.3	74.3	49.2	57.4
Disagree	14.6	5.6	17.5	10.1
Neither	31.1	20.1	33.3	32.5

Notes: * $p < .05$; *** $p < .001$

Responses were on five-point scale with 1 = "Strongly agree" and 5 = "Strongly disagree." In the table, the proportion indicated as "Agree" are those who responded 1 and 2; "Disagree" corresponds to those who responded 4 and 5

14.6 % in 2007). It appears that academics no longer agree with management's view of what is important to run the university.

With regard to differences by gender, the sharp (8.7 percentage-point) decline among men for "Prospects for promotion" (34.6 % in 1992 and 25.9 % in 2007) was particularly noticeable. Other than that, there were no significant gender-based differences, even for salary. However, there was a significant difference between the percentage of men and women who said their salary was "Low" (Table 6.9.): in 1992, 45.2 % and 26.8 %, respectively ($p < .001$); in the 2007 survey, men gave a more negative response (31.3 %) than did women (23.1 %; $p < .05$). There was a greater degree of dissatisfaction among men regarding salary and promotion. A greater awareness among Japanese men of being the breadwinner could be a reason for the significant gap.

On the other hand, the most significant result for women was their response to "My job is a source of considerable personal strain" (Table 6.10). Affirmative responses from women (74.3 % in 1992 and 57.4 % in 2007) were much higher than those from men (54.3 % in 1992 and 49.2 % in 2007; $p < .001$ in 1992 and $p < .05$ in 2007). Women were more stressed by overall academic work than men.

University reforms, precipitated by outside pressure, have revitalized all academics' activities. However, university management has not necessarily gone in the direction that members of faculty had hoped, leading to a breakdown in the sense of community. While male academics are frustrated by lack of promotion and salary,

female academics are concerned by lack of freedom in their teaching and research activities and feel stressed by their academic work.

Considering this, how do they see their own academic profession? One hint can be found in the following question. Affirmative responses to “If I had it to do over again, I would not become an academic” dropped both among men (16.2 % in 1992 and 10.4 % in 2007) and women (16.1 % in 1992 and 15.6 % in 2007). That is, 90 % of male and 85 % of female academics are still attracted to the academic profession.

6.5 Considerations

Progress towards a gender-equal society has promoted a higher educational standing for women and given them the opportunity to acquire higher degrees. Young female researchers are staying on at the university after earning their degrees and are pursuing new career fields by undergoing training as researchers. However, university reforms have had different effects on different academics. Male researchers have proactively engaged in research activities to secure research funding and extend their research publications, and their sense of insecurity related to undergraduate teaching is less pronounced than that in women. The main findings in this study suggest that men are dissatisfied with the financial aspects of their profession, such as prospects for promotion or salary. Women are struggling to create a balance between increased undergraduate teaching and the effort required to be put into research. This means that the closer their desire for research comes to that of men, the more they will be stressed. There is, of course, a limit to how much can be inferred from this study, as men respondents were mainly in the sciences, and there was a very small sample of women. However, gender differences in the amount of, and interest in, teaching and research activities in Japan have been greatly influenced by the country’s historical background.

As mentioned at the beginning of this chapter, men were the only members of the university academic profession involved in academically research-centered teaching for over 60 years, from the establishment of the Imperial University in 1886 until the end of WWII. Women could only enroll in the university after WWII when the new university system popularized higher education (Kimoto 2005). There had been absolute gender inequality in university education in Japan until that point, in accord with the Japanese pre-war higher education system.

In the 21st century, measures for a gender-equal society are pushing forward a new generation of women. Going forward, both a serious examination of academic disciplines and various support systems will be necessary for women to embrace the academic profession. For example, prioritizing a sabbatical system for research time or being appointed to a decision-making body as a reward for the results of her teaching would be desirable. In this widely publicized crisis of the universities, there is an opportunity to increase the viability of universities for young female researchers who are attracted to the academic profession.

This research represents only a part of the research on gender bias in the academic profession. Many other questions remain, particularly from the perspectives of academic disciplines as well as academic institutions and systems.

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