The Comparison of Gender Distribution among School Principals and Teachers in Taiwan, Japan, and South Korea

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Abstract

In 2008, OECD released one multi-national report about one important survey of its twenty-two member countries, the title of this report is "Improving School Leadership: Volume 1 Policy and Practice". This report analyzed one specific common trend of its members, which is the "unique gender divide among school principals and teachers". That meaning of this phenomenon is, in the context of school education in some OECD countries, the ratio of female teachers among all teachers is much higher than male teachers. However, the contrast point is, the ratio of female school principals is significant lower than male principals. This phenomenon is especially significant in the East Asia countries. For example, the percentage of female school principals is significantly lower than male principals when we observed the longitudinal trend in Taiwan. In Japan, the ratio of female teachers in primary schools is 62.7% and the ratio of female teachers in junior high schools is 54.8%, but the ratio of female primary school principals in Japan is only 17.9% of the total principals. When we look at the ratio of female principals in junior high schools in Japan, it is even lower; the ratio is only 5%. Therefore, the main purpose of this study is to explore the unique gender divide among school principals and teachers in Taiwan, Japan, and South Korea. The research methods include document analysis and descriptive statistical analysis. The statistical data is collected from Ministry of Education in Taiwan, Japan, and South Korea. The supplemental data is collected from OECD dataset. This study compares the gender distribution among school teachers and principals in these three countries. In the last section of this study, we discuss the findings and their relationships with social cultures in Taiwan, Japan, and South Korea. Policy and practice implications are offered to rethink the hindrance of female teachers' promotion. How to enhance female teachers' participation in school leadership is another important issue for future studies.

Keywords: gender equity, teacher's career development, school principal, East Asian education

1. Introduction

In 2008, Organization for Economic Cooperation and Development (OECD) conducted a large-scale survey on school leadership of 22 member countries: Improving School Leadership: Volume 1 Policy and Practice (Pont, Nusche, & Moorman, 2008). The survey indicated a common feature of elementary and middle schools of these developed member countries: the phenomenon of "unique gender distribution" in schools, namely, the ratio of female teachers is high, while that of female principals is extremely low. According to the survey, the ratio of female principals in elementary and middle schools in Australia is the highest among 22 member countries. Approximately 80% of the elementary school principals and 55% of the middle school principals are female. Moreover, the ratio of female school principals is reasonable in Israel and Sweden, while that of female school principals in the rest of the countries is low.

The ratio of female teachers in all of the elementary and middle schools in Taiwan has always been high, mostly above 65%. According to the statistics of Ministry of Education (2007a), the ratio of female teachers in elementary and middle schools was 64.83% in 1998 academic year, and 68.24% in 2007 academic year. The ratio slightly increased within the past decade. However, the ratio of female principals in elementary and middle schools has always been low. In 2001 academic year, the ratio of female principals was 19.37%. In 2007

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academic year, the ratio of female principals was 26.86%, which was less than 30%. However, in the same academic year, the ratio of female teachers was approximately 70% (Ministry of Education, 2007b). There was a significant difference between the ratio of female principals among all of the school principals and that of female teachers among all of the school teachers.

In the neighboring Asian countries, such as Japan and South Korea, the ratio of female teachers in elementary schools among all the teachers was 62.7% in 2007, and that of those in middle schools among all the teachers was 41.4%. As a whole, the ratio of female teachers in elementary and middle schools in Japan was 54.8%. The ratio of female teachers in elementary and middle schools in South Korea was high as well, which was similar to that of other countries. The ratio of female teachers among 240,000 public elementary and middle schools in 2006 was 71.5%, which was similar to that in Taiwan. The number of female teachers in elementary and middle schools in Japan was low, compared to that in Taiwan and South Korea. As for the ratio of female principals in Japan, the data in 2007 showed that the ratio of female principals in elementary schools was only 17.9%, with a total of 3,914 female principals. The number of female principals in middle schools was even fewer, and there were only 481 female principals in middle schools (less than 5% of all of the middle school principals). There was a significant difference between the ratio of male school principals and that of female ones in South Korea. The ratio of male school principals among all of the school principals had been maintained at 90% or above since 1999. In 2006, the ratio of female elementary school principals was 9.3%, with a total of 531 female principals. In 2006, the ratio of female middle school principals was 11.1%, with a total of 294 female principals. The comprehensive analysis showed that the number and ratio of female principals in Japan and South Korea were not only low in OECD member countries, but also significantly lower than those in Taiwan.

The situation in Taiwan is similar to that in Japan and South Korea. For the phenomenon of "unique gender distribution" of school members in the OECD county members, namely, the ratio of female teachers is extremely high, while that of female principals is extremely low. It is uncertain whether the cause is gender stereotyping that considers male as the proper role in leadership, or the social expectation that believes female should act as staff members, obey instructions, and engage in less decision-making, or there is a gender difference in features, styles, and forms of principal leadership. Therefore, this study aims to understand the current status of female teachers and principals in elementary and middle schools in Asia based on the investigation, analysis, and comparison on the number and ratio of female teachers and principals in elementary and middle school in Taiwan, Japan, and South Korea. The research methods include document analysis and descriptive statistical analysis. The statistical data is collected from Ministry of Education in Taiwan, Japan, and South Korea. The supplemental data is collected from OECD dataset. This study compares the gender distribution among school teachers and principals in these three countries. In the last section of this study, we discuss the findings and their relationships with social cultures in Taiwan, Japan, and South Korea. Policy and practice implications are offered to rethink the hindrance of female teachers' promotion. How to enhance female teachers' participation in school leadership is another important issue for future studies.

2. Review of the Related Literature

Literature review of this study begins with a review of the equity issues of gender and educational administration and followed by a review of discussing the relationship between gender and leadership styles of school principals.

2.1 Equity Issues of Gender and Educational Administration

The gender difference of career pattern and placement of women has been a focus of many academic fields. As the question Shakeshaft (1989) poses "are women represented in administration in equal proportions to their representation in teaching?" The answer is no. In fact, females are overrepresented in teaching and underrepresented in administration (Shakeshaft, 1989). This phenomenon is no exception in the field of educational administration and principal leadership. In most of countries, women's earnings are significantly lower then men. In the case of the United States of America, the existence of salary differentials between gender has been noticed and cared for a long time (Pounder, 1988). As Pounder (1988) points out, the earnings gap between men and women educational administrators are largely ignored in the literature. But, Pounder's study reveals that earnings gap in male and female administrative salaries are more directly relating to position segregation and professional experience profile (Pounder, 1988). A policy implication is generated via this research is to place more women into higher paying administrative positions, such as secondary principals and superintendent (Pounder, 1988).

Similarly, Tallerico (2000) applies gatekeeping theory and career mobility theory to explain how male and

female gaining access to the superintendency by the case of the state of New York in the United States. Gatekeeping theory, developed by Lewin (1947), was developed to explain the food selection process, is applied here to explain the selection process of superintendent. This research viewing superintendent selection as a flow process through a variety of channels. These channels mean "in" or "out" decision points in the process. Riehl and Byrd's (1997) research set gatekeeping theory as their conceptual framework and developed their model of administrative career mobility. They found out that personal and socialization factors, such as aspiration, qualifications, and experience cannot assure women's equally opportunity with men in administrative career development. Gender-stereotyped forces will significantly influence women's action for advancement.

2.2 Gender, Leadership, and School Principals

Because of the fact that there is relatively few women occupy major administrative roles in schools though large numbers of women are in the teaching profession (Eagly, Karau, and Johnson, 1992), there are some studies start to explore the gender difference in principals' leadership style. Eagly, Karau, and Johnson (1992) applied meta-analysis as research method and review about 50 studies that compared the leadership styles of principals of public schools and the differences between the sexes. They found out that female principals tend to lead in a more democratic and less autocratic style than did male principals. Also, female principals are more likely to treat teachers and staff as colleagues and use collective decision making process. Female principals, compared with male principals, are more task-oriented, which means female principals tend to organize school activities and carry out necessary tasks by establishing rules and high standards (Eagly, Karau, and Johnson, 1992).

3. Research Findings

In this section, we will compare the collected statistical data and analyze the number and ratio of female principals among elementary and middle school teachers in Taiwan, Japan, and South Korea. We will firstly analyze the number of Taiwan, then in the second section, Japan's data would be analyzed. Thirdly, South Korea will be analyzed as the third case.

3.1 Number of Female Teachers and Principals in Elementary and Middle Schools in Taiwan

Table 1 showed that in Taiwan, the ratio of female teachers in elementary schools did not change significantly within the past 10 years, and accounted for approximately 66%, 67%, and 68% of the human resource structure of teachers. However, the ratio of female teachers in middle schools from 1998 academic year to 2007 academic year maintained at 60% or above within these 10 years, and slightly increased from 62% to 67%. The data above showed that female teachers were the main human resource of teachers in elementary and middle schools in Taiwan. As a whole, female teachers in elementary and middle schools were the main human resource of fundamental education. In general, there were 7 female teachers in every 10 teachers in elementary and middle schools.

Table 1. Number and ratio of female teachers in elementary and middle schools in Taiwan from 1998 academic year to 2007 academic year

	Elementary	Schools	Middle Sch	ools	Total	
Academic year	Number	%	Number	%	Number	%
1998	62,832	66.1	32,140	62.5	94,972	64.83
1999	65,729	66.6	31,835	63.4	97,564	65.50
2000	67,843	66.8	31,658	64.1	99,501	65.90
2001	69,938	67.6	32,207	65.3	102,145	66.84
2002	70,986	68.1	32,472	66.1	103,458	67.44
2003	70,298	67.7	32,573	66.7	102,871	67.39
2004	69,948	68.0	32,477	67.3	102,425	67.75
2005	69,328	68.2	33,028	67.7	102,356	68.01
2006	68,628	68.2	33,663	67.7	102,291	67.99
2007	69,416	68.5	34,763	67.7	104,179	68.24

Source: Ministry of Education in Taiwan (2007a).

In the case of Taiwan, the change in ratio of female principals in elementary and middle schools was more significant than that of female teachers. As shown in Table 2, the ratio of female principals in elementary and middle schools was approximately 20% after 2001 academic year and steadily increased to nearly 30% in 2007 academic year. However, the ratio of female principals in 1994 academic year was less than 1/10. The data showed that the number of female middle school principals in Taiwan was 44 (6.10%) in 2004 academic year. As for elementary school principals, the number of female principals was 209 (8.30%) (Lin, 2002). From 1994 to 2001, the ratio of female principals increased from 7% to 19%, namely, the total number of female principals in elementary and middle schools rapidly increased from 253 in 1994 to 643 in 2001. From 2001 to 2007, the ratio of female principals steadily increased by 1% year by year. As of 2007, the total number of female principals in elementary and middle schools was 911.

Table 2. Number and ratio of female principals in elementary and middle schools in Taiwan from 2001 academic year to 2007 academic Year

	Elementary	Schools	Middle Sch	ools	Total	
Academic year	Number	%	Number	%	Number	%
2001	511	19.57	132	18.64	643	19.37
2002	564	21.47	145	20.25	709	21.20
2003	603	22.86	158	21.94	761	22.66
2004	649	24.53	173	23.93	822	24.39
2005	672	25.31	191	26.09	863	25.47
2006	693	26.14	192	26.09	885	26.12
2007	707	26.67	204	27.57	911	26.86

Source: Ministry of Education in Taiwan (2007b).

Tables 1 and 2 indicate that, in the case of Taiwan, the human resource of fundamental education is mainly composed of female teachers; however, the number of female principals is inconsistent with the ratio and structure of female teachers. The difference in the ratios between male/female teachers and male/female principals revealed that: male and female teachers faced unequal opportunities as they competed for the post of principal. Taking 2007 academic year for example, among a total of 152,664 teachers, there were a total of 48,485 male teachers (31.76%) in elementary and middle schools. However, among a total of 3,391 school principals in that academic year, 2,480 of them (73.14%) were male (Ministry of Education in Taiwan, 2007a; 2007b). In other words, there was one male principal in every 19.55 male teachers. However, among a total of 104,179 female teachers, there were only 911 female principals. In other words, there was one female principal in every 114.37 female teachers.

This study intended to understand whether the low ratio of female teachers serving as school administrative supervisors led to the relative low ratio of their promotion to principals. As shown in Table 3, in 2007 academic year, a total of 13,819 female teachers (54.33%) concurrently served as section chiefs, and a total of 5,424 female teachers (42.57%) concurrently served as directors. On the average, nearly half of the 1st/2nd-level school administrative supervisors were female.

Table 3. Number and ratio of female section chiefs and directors in elementary and middle schools in Taiwan in 2007 academic year

2007 Academic	Elementary	y Schools	Middle Sch	nools	Total	
Year	Number	%	Number	%	Number	%
Section Chiefs	9,528	53.26	4,291	55.40	13,819	54.33
Directors	3,696	40.25	1,728	44.88	5,424	42.57

Source: Ministry of Education in Taiwan (2007c).

As shown in Table 3, the ratio of male/female teachers serving as section chiefs or directors was equal. Theoretically, teachers serving as section chiefs have more opportunities to participate in the selection or reserve training of director. Similarly, those who intend to participate in the reserve course or training of principal have to at least service as directors in order to participate in the selection of principals. However, the data above showed that the ratio of half of female section chiefs and directors who continuously pursued the senior post of principal was only 27%. On the contrary, approximately 1/2 of all of the1st/2nd -level administrative supervisors were male section chiefs and directors. However, 73% of them promoted to principals. In other words, the intention to continuously participate in selection or reserve training to become principals of female teachers, section chiefs, or directors was lower. There was no significant difference in the number and ratio between male section chief/directors and female ones. However, there was a significant change in the further promotion to principals.

3.2 Number of Female Teachers and Principals in Elementary and Middle Schools in Japan

The education system in Japan is similar to that in Taiwan and South Korea. Children start the 6-year elementary school education at the age of 6, and the length of middle school and high school is both 3 years. The first 9 years of education is the compulsory education (Wang, 1999). The population in Japan is as high as 130 million, and that in South Korea is 50 million. The population (23,000,000) in Taiwan is the least among these three countries. Therefore, compared to the number of teachers in public elementary and middle schools in Taiwan and South Korea, the number of teachers in those in Japan should be the largest. As shown in Table 4, in 2007, there were more than 360,000 female teachers in elementary and middle school in Japan. The ratio of female teachers in elementary schools decreased from 65% (237,000) in 2002 to 62.7% (262,000) in 2007. The number of female teachers in middle schools increased from 87,000 (24.6%) in 2003 to 103,000 (41.4%) in 2007. As a whole, the ratio of female teachers in elementary and middle schools in Japan was 54.8%, which was lower than that of those in Taiwan where female teachers were the main human resource. However, one of the features of female teachers in elementary and middle schools in Japan was that the human resource structure was mainly composed of female teachers (65%) in elementary schools, which was similar to that in Taiwan. However, the ratio of female teachers in middle schools was not high and it was not until 2007 did it significantly increase to 40%.

Table 4. Number and ratio of female teachers in elementary and middles schools in Japan from 2002 to 2007

	Elementary	Schools	Middle Sc	hools	Total	
Year	Number	%	Number	%	Number	%
2002	237,612	65	m	m	m	M
2003	241,609	65	87,506	24.6	329,115	45.25
2004	246,329	65	m	m	m	M
2005	248,338	64.90	m	m	m	m
2006	250,742	64.90	m	m	m	m
2007	262,387	62.7	103,363	41.4	365,750	54.8

Source: UNESCO Institute for Statistics. (2006); Ministry of Education, Culture, Sports, Science & Technology in Japan (2007).

The data on female principals in Japan in 2007 (Table 5) showed that the ratio of female principals in elementary schools was only (17.9%), with a total of 3,914 female principals. The number of female principals in middle schools was even fewer (only 481 female principals), and was less than 5% of the total number of middle school principals. As a whole, the ratio of female principals in Japan was the lowest among all of the OECD member countries, and it was also lower compared to that in Taiwan and South Korea.

Table 5. Number and ratio of female principals in elementary and middle schools in Japan in 2007

	Elementary	Schools	Middle Sch	ools	Total	
Year	Number	%	Number	%	Number	%
2007	3,914	17.9	481	4.9	4,395	13.8

Source: Ministry of Education, Culture, Sports, Science & Technology in Japan (2007).

3.3 Number of Female Teachers and Principals in Elementary and Middle Schools in South Korea

Ministry of Education in South Korea was renamed as the Ministry of Education and Human Resources Development in 2001, and is the highest educational administrative sector, including 16 provincial education departments and 180 regional education departments. The education in South Korea is characterized by the three-level education system. Basically, the educational administrative system in South Korea is subordinate to the central government, especially in three aspects, finance, personnel, and supervision. As much as 80% of fund for regional education originates from the central government. Therefore, principals only have limited autonomy and power to appoint teachers and other personnel and to choose curriculum (national curriculum). The public and private kindergartens, elementary schools, and middle schools in South Korea are under the management of regional education departments. One of the features of South Korea was that the ratio of private elementary and middle schools was higher than that in Taiwan. In 2005, 1.3% of the elementary schools and 22.9% of the middle schools were private. The ratios of private senior high schools and colleges were even higher, and were 44.8% and 84.7%, respectively. As shown in Table 6, there were a total of 7,847 national and public elementary and middle schools, and a total of 244,136 teachers.

Table 6. Number of elementary and middles schools and teachers in South Korea in 2005

	Total	National	Public	Private
Number of elementary schools	5,646	17	5,554	75
Number of elementary school teachers	160,143	469	159,674	1,737
Number of middle schools	2,935	9	2,267	659
Number of middle school teachers	103,835	372	83,621	19,842

Source: Kim et al. (2006), OECD improving school leadership: Country background report for Korea, p. 114, retrieved from http://www.oecd.org/edu/schoolleadership.

The ratio of female teachers in elementary and middle schools in South Korea was also the highest, compared to that of other countries (Table 7). The ratio of female teachers in a total of 240,000 public elementary and middle schools in 2000 was 66%, and that of those in 2006 was 71.5%. As a whole, the ratio was approximately 70%, which was similar to that in Taiwan. The ratio of female elementary school teachers had been more than 70% since 2000, and that of female middle school teachers was 60% to 65%.

Table 7. Number and ratio of female teachers in elementary and middle schools in South Korea from 2000 to 2006

	Elementary	y Schools	Middle S	Schools	Tota	al
Year	Number	%	Number	%	Number	%
2000	88,213	70.3	52,027	59.7	140,240	66
2001	916,25	71.6	53,582	61	145,207	67.3
2002	95,845	72.2	55,473	62	151,318	68.1
2003	101,475	72.6	59,185	63	160,660	69
2004	105,164	74	60,926	64	166,090	69.8
2005	108,447	75	62,920	64.4	171,367	70.7
2006	112,151	76	65,361	65	177,512	71.5

Source: UNESCO Institute for Statistics. (2006). 2008, 12, 22, retrieved from http://stats.uis.unesco.org/unesco/ReportFolders/reportfolders.aspx

The teacher and principal associations in South Korea are very active. There are two types of teacher

associations. One is professional academic association, such as the South Korean Federation of Teachers' Association, and the other is labor union, such as South Korean Teachers and Educational Workers' Union. Principal associations vary with the level of schools, including elementary school principal association and national and public middle school principal association. It is noteworthy that there are two female principal associations in South Korea, Korea Association of Female Elementary School Principals and Korea Association of Female Secondary School Principals. In addition to affecting educational issues by issuing public announcements, these associations also hold symposiums and workshops spontaneously. The selection of principal in elementary and middle schools in South Korea is similar to that in Taiwan. Basically, general teachers will be promoted to vice principal, and vice principal will be promoted to principal. In general, teachers are highly wiling to be promoted to principal, and the competition for vice principal among teachers is particularly fierce. Most of the principals will maintain the post until they retire. Consequently, the turnover of principals in elementary and middle schools in South Korea is extremely low, and principal is a very stable post.

The difference in ratio between male and female principals in elementary and middle schools in South Korea was significant. As shown in Table 8, the ratio of male principals among all of the principals had been maintained at more than 90% since 1999, with a total of 7,900 principals. The number of female elementary school principals slightly increased from 309 (5.6%) in 1999 to 531 (9.3%) in 2006. The ratio of female middle school principals increased slightly year by year. The number of female middle school principals increased from 182 totally (7.5%) in 1999 to 294 totally (11.1%) in 2006. Although the ratio of female principals increased year by year, the number of female principals in elementary and middle schools in South Korea was smaller than that of male ones. However, unlike other countries, the ratio of female middle school principals among all of the principals in South Korea was higher than that of female elementary school principals among all of the principals.

Table 8. Change in number and ratio of female principals in elementary and middle schools in South Korea from 1999 to 2006

Year		2006	2005	2004	2003	2002	2001	2000	1999	Total
	Total	5,695	5,614	5,505	5,422	5,350	5,286	5,232	5,506	43,610
Elementary school	Female	531	490	423	377	373	381	367	309	3,251
	%	9.3	8.7	7.7	7.0	7.0	7.2	7.0	5.6	7.4
	Total	2,642	2,582	2,534	2,495	2,431	2,361	2,357	2,416	19,818
Middle school	Female	294	255	249	250	248	228	206	182	1,912
SCHOOL	%	11.1	9.9	9.8	10.0	10.2	9.7	8.7	7.5	9.6

Source: Kim et al. (2006), OECD improving school leadership: Country background report for Korea, p. 115, retrieved from http://www.oecd.org/edu/schoolleadership.

As a whole, the mean age of principals in elementary and middle schools in South Korea was higher than that of other OECD member countries. 45.2% of the elementary school principals and 52.6% of the middle school principals were over the age of 60. The seniority of principals also revealed the aging of principals in elementary and middle schools in South Korea. In 2005, among all of the principals in elementary and middle schools, 83.9% of elementary school principals and 57.57% of the middle school principals had served for more than 35 years. In terms of female principals, only 5 of them (1%) had served for less than 25 years, 79 of them (16.12%) had served for 25-35 years, and 406 of them (82.85%) had served for more than 35 years. In terms of middle school principals, only 11 of them (4.31%) had served for less than 25 years, 134 of them (52.55%) had served for 25-35 years, and 110 of them (43.14%) had served for more than 35 years (Kim, et al., 2006). To sum up, the characteristics of the elementary and middle principal system in South Korea are as follows. First, the post of principal is extremely attractive among all the posts as administrative supervisors. A teacher cannot have the opportunity to become a principal unless he/she has worked as an educator for at least 30 years. Therefore, the salary of a principal is undoubtedly high owing to the high seniority. Education-related decision makers do not have to worry about the potential shortage or high turnover of principals. Second, it is almost impossible for young teachers or those with excellent abilities to have a chance to become educational administrative professionals. Third, there is a lack of performance evaluation system for principals; therefore, the abilities and role of principal are limited. Fourth, the issues faced by principals include the conflicts in teachers' labor union and parents' rising demand for performance, which also increase the challenges to principal leadership.

3.4 Number of Female Teachers and Principals in Elementary and Middle Schools in Other Countries

This study also collected the data from New York State, U.S. to compare it with the number of female teachers and principals in three Asian countries, Taiwan, Japan, and South Korea. As shown in Table 9, the ratios of female teachers and principals in New York State in 1996-7 showed that, as much as 70% of the human resource in elementary and middle schools was female teachers. The ratios of female middle school principals and that of female elementary school principals were 23% and 46%, respectively, and were higher than those in Taiwan in 1996. In 2006-7, the ratios of female principals in elementary school and middle school were 80.1% and 62.7%, respectively, which fully reflected the ratio of female teachers in elementary and middle schools.

Table 9. Percentage of female teachers, principals, and administrative personnel in New York State from 1996-7 to 2006-7

Job Categories	Percentage of female (1996-7)	Percentage of female (2006-7)
Teachers in elementary and middle schools	72.0	75.2
Elementary school principals	46.0	80.1
Middle school principals	23.0	62.7
Educational administrative Supervisors	14.4	67.4
Licensed administrative staff	65.8	62.3

Source: Data in 1996-7 was from Ren-qin Chung Trans. by Chung (2004). Creating a Gender-compliant Workplace. Page 157.

Data in 2006-7was from New York State Education Department Information and Reporting Services.(2007), retrieved from http://www.emsc.nysed.gov/irts/pmf/2006-07/home.shtml

There is no perfect ratio for female teachers and principals in elementary and middle schools in the world. The data of New York State reflected the balanced ratios of female teachers and principals because as the number of female members in an organization exceeds that of male ones, the gender of leaders is expected to that that of most of the organization members.

4. Comparison of Female Teachers and Principals in Elementary and Middle Schools in Taiwan, Japan, and South Korea

The analyses on the data above found that:

- 1) The ratio of female teachers in elementary and middle schools in Taiwan in 2007 academic year was 68%, and that of female principals was 27%.
- 2) The ratio of female teachers in elementary and middle schools in Japan in 2007 was 55%, and that of female principals was 14%.
- 3) The ratio of female teachers in elementary and middle schools in Korea in 2006 was 72%, and that of female principals was 10%.

Female teachers are the main human resource in elementary and middle schools in Taiwan, Japan, and South Korea. The ratio of female teachers in South Korea was the highest (approximately 70%), and that in Japan was the lowest (more than 50%). The ratio of female teachers in elementary and middle schools in Taiwan was approximately 70%, and that in New York State in 2006 academic year was 75%. As for the ratio of female principals, the comparison of three countries, Taiwan, Japan, and South Korea, showed that the ratio in Taiwan was the highest. The ratio of female teachers in elementary and middle schools in South Korea was the highest.

However, the ratio of its female principals was the lowest (10% only).

5. Conclusion

The phenomenon of "unique gender distribution" existed in the ratios of male/female principals in these three Asian countries. Moreover, the difference between number of female teachers and number of female principals was significant. Such a difference in Taiwan and Japan was approximately 40%, and that in South Korea was as high as 60%. In other words, 70% of all the teachers in elementary and middle schools in South Korea were female teachers. However, only 1/10 of the all of the principals were female principals. From 2006 to 2007, the ratio of female principals in elementary and middle schools in Taiwan was 27%, that in Japan was 14%, and that in South Korea was 10%. As a whole, the ratios of female principals in elementary and middle school in these three Asian countries were relatively low. The ratio of female principals in New York State from 2006 to 2007was as high as 71%, which was significantly higher than that in Taiwan, Japan, and South Korea. Whether such a phenomenon is caused by the design of system, culture, or tradition, it is necessary to investigate the reason why it is less likely for female teachers to become principals in the future, to take into account the factors affecting female teachers' promotion to supervisors, and investigate whether these obstacles can be eliminated. It is important to urge female teachers to become school leaders in the 21st century to comply with the balanced gender distribution in campus.

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