

Female Workers in Japan: Opportunities & Challengesⁱ

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Abstract

This study is based on a survey of male and female workers in organizations in and around Nagoya, Japan. It provides insights into gender issues within Japanese business organizations. The study finds that the female managers in Japan assess the managerial skills of women more positively than do their male counterparts. Business organizations in Japan are male-dominated and little is done to help women fit into the business culture. This is especially true when one considers the number of females in management ranks. Female workers in Japanese businesses perceive that they make many positive contributions to the workplace, such as focusing on process rather than just results, paying attention to details, showing compassion and care in decision making, expressing willingness to “go an extra mile,” being sensitive to human relations, and offering a fresh perspective to business problems. It is not popular in Japan for females to use legal means against accepting a slower rate of advancement to cope with gender-bias.

Key Words: Japanese women workers, labor, managers.

Introduction: Background to the “Men first society.”

Even today in the Japanese economy, the number of female senators and representatives in government, female professors in universities, and female executives in companies is very small (Table 1). “Japan is still a developing country in terms of gender equality,” said Mariko Brando, an aide to Prime Minister Junichiro Koizumi (New York Times, July 25, 2003). In 2003, *Economic Forum* ranked Japan 69 out of 75 member nations in empowering its women. Not only do few women occupy high level positions in business and government, but their wages are about 65 percent of those of their male counterparts, one of the largest gaps in the industrial world according to a New York Times’ article of July 25, 2003.

Table 1: How Women Fare in Japan to Other Industrialized Countries

	Women as a percentage of....				
	All Workers	Managerial Workers	General Civil Service	Managerial Civil Service	National Parliament/ Congress
Japan	41.0%	8.9%	20.2%	1.4%	7.3%
USA	46.6	46.0	49.3	23.1	14.3
Sweden	48.0	30.5	43.0	51.0	45.3
Germany	44.0	26.9	39.0	9.5	32.2
Britain	44.9	30.0	49.1	17.2	17.9

Sources: Quoted in New York Times, July 25, 2003. Data compiled from: The Cabinet Office of Japan; International Labor Organization; Inter-Parliamentary Union

One of the reasons attributed to this under-representation of women in the work force lies in the history of Japanese society and its attitude toward women. Traditionally, women are hired for short-term clerical work and tea serving. These women are called "Office Ladies," or simply "O.L.'s." Career positions are reserved exclusively for men. Besides such biases, there is also evidence of a general disrespect for women. For example, a New York Times' article on July 25, 2003, reports that former Prime Minister Mr. Yoshiro Mori was widely quoted as saying, the main reason for Japan's failing birthrate was the over education of its women. Mr. Yasuo Fukuda, top aide of current Prime Minister Mr. Koizumi, was quoted as saying, that often women who are raped deserve it. A legislator from the governing party also stated that the men who carried out such acts were virile and "good specimens."

Historically, in the *Edo* era of 1600-1867, Ieyasu Tokugawa enacted a law of "*do not get closer, not to let them know*"; that is, do not involve females in activities and keep them ignorant (Inoue, 1994). In the *Bushi-do* (chivalry) society, men preferred to keep women away from the academic field, literature, and almost every other cultural activity. The main objective of this male-run society was to keep *them*, women, in the "*Ie*" (house). In the *Meiji* period of 1868-1915, the government carried out a policy of "National Enrichment and Security" that was based on militarism, which was then followed by capitalism and the start of a new "male-centered society."

One of the central reasons proffered as to why men preferred this style of society is the prevalence of a belief in biological essentialism, that is, the idea that natural differences between genders confer social roles. Many Japanese men believe that because women become pregnant, they are solely responsible for raising children (Chunichi Paper, 2000). Men normally have no responsibility in raising the children, except in providing financial support.

After World War II, General Head Quarter of American Forces (GHQ), brought American culture into Japanese society by initiating a "right to vote" bill for Japanese women in 1945. In the 1960s, rapid economic development brought a new awakening to Japanese women. The availability of products such as washing machines, electrical cookers, and microwaves reduced women's work at home. These developments led to women having time to work outside the home.

It was not until the 1980s that women began to attend colleges or universities and thereby acquire higher education. Today, the majority of young women are enrolled in institutions of post-secondary education; however, the inclusion of females in the workplace is still slow. After World War II, women were able to hold jobs for only few years before they got married; they were forced to marry two or three years after they graduated from high school or college. At this time, women were also expected to quit their jobs as society dictated. This norm led to the practice of a "men first society," which ingrained in Japanese society the philosophy that *men should be stronger, wiser, and more important than women*. However, during the 1980s, females realized the importance of higher education. For them, education was the route to acquiring higher

social status and escaping male-domination. During the 1990s, the number of female students enrolled in colleges began to out-number male students. As a result, by 2000, the overall education profile of female workers in Japan began to steadily approach that of men. The average number of years of education for females, ages 15 and older, increased from 10.39 years in 1970 to 11.85 years in 2000 (Yamada, Koshal, Miyazima, & Koshal, 2002). For males these figures are 10.86 years and 12.37 years respectively.

In the Japanese "male-centered society," men worked their whole lives to provide for their families. Since World War II, it has been the belief of Japanese people that the employers and employees are one family. The employer was expected to protect the employees and their families. Recently, however, the younger generation seems to have an entirely different way of thinking about employer-employee relationships. They do not expect the guarantee of life-time employment from their employers. Employee loyalty toward employer is also diminishing. Male-female roles and expectations of each other are also changing. Due to such changing attitudes of the younger population the "male-centered society" tradition is slowly vanishing.

Unfortunately, professional women still face discrimination, and the "glass ceiling" phenomenon is still very much in existence in Japan (World of Work: The Magazine of the I.L.O., 1998). In fact, this phenomenon exists in most of the world. Stereotypical attitudes towards women's abilities to lead and succeed in business organizations exist as observed by several cross-cultural studies (Stead, 1985; Hunsaker & Hunsaker, 1986; Gupta, Koshal, & Koshal, 1998 a,b). Likewise, even a majority of male managers in China believe, "the managerial success of women is constrained by their lack of dedication to pursuing a career with minimal commitment to the employing organization, insufficient experience, little interest in managerial roles and the lack of proper education" (Leon & Ho, 1994). Studies also show that male managers perceive women as lacking leadership qualities or possessing inferior leadership traits. As a result many men feel uncomfortable working under female leaders (Sostella & Young, 1991; Leon & Ho, 1994; Lau & Kaun, 1998).

From a legislative perspective, however, things have significantly changed in Japan. A number of covenants have been passed to eliminate discrimination against women. Two of the most significant covenants are the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the International Covenant on the Elimination of All Forms of Discrimination against Women (CEDAW). These international covenants are increasing the awareness of gender biases in Japan and encourage Japanese society to eliminate discrimination against women.

Research Focus

This study is an exploratory research of Japanese female business workers. It focuses on the perceptions and attitudes of male and female workers towards their female co-workers. The objective of this study is to investigate the extent to which stereotypical attitudes about female employees are still prevalent in modern Japan and proffers some suggestions about what women can do to advance within their companies. In this paper, the following four key questions are explored:

1. What type of work environment do Japanese female employees encounter?
2. What are the perceptions of managerial competencies of female managers in Japan?

3. How important to Japan's corporate world are women's special contributions to the work environment?
4. What coping strategies do female managers use to counter gender bias in Japan?

The answers to these questions will to some extent fill in gaps in the research on gender issues in an Asian context and perhaps assist business organizations in Japan to manage better their diverse human resources.

Research Methodology

Sample & Data Collection:

Two hundred questionnaires were distributed to workers in various organizations in and around Nagoya, Japan. Nagoya is the fourth largest city in Japan and is fairly representative of the Japanese workforce. The English version questionnaires were translated into Japanese. Within each organization, the human resource department randomly selected an equal number of male and female workers to complete the questionnaires. The workers belong to organizations such as manufacturing plants, educational institutions, hotels, banks and retail businesses. The respondents were asked to complete the questionnaires and mail them directly to one of the authors of this study in pre-paid and addressed envelopes provided to them. Out of the 200 questionnaires distributed, 121 usable questionnaires were returned with a response rate of 60 percent. The sample consisted of 53 males and 68 females. A sample size of 121 is not large enough to develop broad-based findings. However, for a first time exploratory study of this type, the sample size provides a spring board for some general evaluations and assessments.

Respondent Profile:

The sample consists of 56 percent female and 44 percent male workers. The age of the respondents varies between 20 and 60 years. Most of the respondents have an education level varying from high school to four years of college education. A small percentage of respondents have junior high school and graduate school education levels. The respondents are white and blue-collar workers and have assignments at different levels in their respective organizations.

Results

The analysis of data is based on 121 questionnaires received and is organized around the four research questions discussed above. The findings are as follows:

1. Work Environment for Female Employees in Japanese Organizations:

Respondents were asked four questions: (i) whether advancement in the organization is based on merit or gender, (ii) the extent to which their organizations encourage female workers to advance up the corporate ladder, (iii) whether men are assumed to be competent unless proven otherwise, and (iv) whether females are perceived to be as committed to their jobs as males. In Table 2, a significantly greater proportion of male workers (76.5 percent) than female workers (47.0 percent) agreed that no one feels disadvantaged; (difference in proportions is significant at least at the 0.01 level). A significantly smaller proportion of female workers (47 percent female versus 76.5 percent

male) agree that the gender of the worker is a major factor in organizational advancement decisions and not the competence of the worker. Similarly, when asked if this organization encourages females to assume leadership roles, 32.8 percent of female versus 78.4 percent of male managers agreed. The differences in the proportions were again statistically significant (significant at least at the 0.01 level). It appears that an almost equal proportion of the female and male respondents (75.8 percent and 76.5 percent) in our survey perceive that men are assumed to be competent until they prove their incompetence in their organizations. However, a smaller proportion of female respondents (65.7 percent) as compared to male respondents (78.8 percent) agreed that women are as committed to their jobs as men in their organizations (difference in proportions is not statistically significant.)

By examining the data in Table 2, one can conclude that the percentage of male workers who agreed to the four questions was larger than the percentages of female workers. The differences in proportions were, however, significant on two questions. The findings suggest that women feel disadvantaged in corporations and believe that organizations do not encourage them enough to assume leadership roles and that a person's gender rather than competence is considered important in decisions related to who gets to climb the corporate ladder. Men are generally assumed to be competent both by men and women. Interestingly, women do not consider themselves as committed to their jobs as men think of women.

Table 2: Work Environment for Female in Japanese Organization

	Percentage that agree with each statement		DIFFERENCE (Male-Female)
	Male	Female	
1. The culture of the organization is such that no one feels disadvantaged; competence, not gender is an issue.	76.5	47.0	29.4***
2. Organizations encourage females to assume leadership roles.	78.4	32.8	45.6***
3. In organizations, men are assumed to be competent until they prove their incompetence.	76.5	75.8	0.7
4. In organizations, females are considered as committed to their jobs as men.	78.8	65.7	13.1

NOTE: *** represents statistically significant at least at the 1percent level.

2. Leadership Styles, Managerial Competencies and Social Expectations:

Some of the issues explored in this section include:

- (i) Do females differ in the way they think or approach problems?
- (ii) Do women exhibit/prefer different styles of management than men?

- (iii) Are women and men given an equal opportunity to acquire business education or management training?
- (iv) Do women or men take more responsibility for the household work including the raising of children?

In Table 3 there is little variation observed in the perceptions of male and female respondents with respect to (a) females more often support innovative programs or radical changes than males (90.2 percent males and 87.0 percent females agree), (b) whether women who stay at home full-time to look after their children are better mothers (88.2 percent males and 83.3 percent females agree), and (c) raising children is mainly a woman’s responsibility (90.2 percent males and 87.9 percent females agree). However, a significantly greater proportion of women as compared to men agreed that house work is still a “women’s work.” Even today in Japan, child rearing and household management are regarded as the most appropriate tasks for women. We found that, 71.2 percent of male and 90.6 percent of female workers agree that housework is mainly women’s work (difference in proportions is statistically significant at least at the 0.01 level).

When asked whether females and males differ in the way they think or approach a problem, 61.1 percent of male and 76.6 percent of female workers believed that their thinking is different (difference is statistically significant at least at the 0.01 level). While only about 51.0 percent of male respondents and 76.9 percent of female respondents agreed that women exhibit/prefer the interactive leadership style (difference is statistically significant at least at the 0.01 level), 84.3 percent of male and 69.6 percent of female managers admitted that men, on the average, exhibit/prefer the command-and-control leadership style (difference in proportions is significant at least at the 0.10 level). In contrast, only 31.4 percent of females and more than 79.0 percent of males agreed that females are less capable of learning business management skills than men (difference is statistically significant at least at the 0.01 level). These findings point out some interesting issues concerning males’ perception that women are less capable of learning new skills than men.

One reason for this perception is that, generally, business managers believe that the command-and-control leadership style is the best indicator of managerial success. Because women adopt an interactive style of leadership, the male perception is that women are not as capable or effective business leaders.

Table 3: Leadership Styles, Managerial Competencies and Social Expectations

	Percentage who agree with each statement		
	Male	Female	DIFFERENCE (Male-Female)
1. Females are more likely than males to support innovative programs or radical change.	90.2	87.0	3.2
2. On the average, a woman who stays at home all the time with her children is a better mother than a woman who works outside the home at least half	88.2	83.3	4.9

time.			
3. Raising children is mainly women's responsibility.	90.2	87.9	2.3
4. House work (shopping, cooking, washing dishes, washing clothes, cleaning) is mainly women's work.	71.2	90.6	-19.4***
5. Females and males differ in the ways they think or approach a problem.	61.1	76.6	-15.5*
6. Females, on the average, exhibit/prefer the interactive leadership style.	51.0	76.9	-25.0***
7. Men, on the average, exhibit/prefer the command-and-control leadership style.	84.3	69.6	14.7*
8. Males and females are given equal opportunity for participation in business education or management training programs.	81.6	30.2	51.4***
9. Females are less capable of learning business management skills than are males.	79.6	31.4	48.2***

Notes: *** represents statistically significant at least at the 1 percent level.

* represents statistically significant at least at the 10 percent level

Unfortunately, both male and female workers are unaware that the interactive style of management is regarded as the best style of leadership for successful global operations (Gupta, Koshal, & Koshal, 1998 a, b). The literature review confirms this fact (Alder, Izraeli, 1994). Interestingly, these findings were also found in studies of managers in India and Malaysia (Gupta, Koshal & Koshal, 1998 a, b).

Another important perception is that women are not given equal training or equal opportunities to be leaders. The results of this study as well as earlier studies, confirm that only 30 percent of female managers and more than 81 percent of male workers agree that men and women are given equal opportunity to participate in business education (difference is significant at least at the 0.01 level).

3. Special Contributions of Women to the Work Environment

What special talents, traits, and perspectives do female managers bring to the work environment? In general, the data in Table 4 reveals that female workers think they make many positive contributions to the workplace, such as focusing on process rather than just results, paying attention to details, showing compassion and care in decision making, expressing willingness to "go an extra mile," being sensitive to human relations, and offering a fresh perspective to business problems.

Table 4: Special Contributions of Women to the Work Environment

	Percentage who agree with each contribution of women		
	Male	Female	DIFFERENCE (Male-Female)
1. Women bring compassion/care in decision making	51.0	73.0	-22.0***
2. Women bring a different perspective to business problems	56.9	74.2	-17.3*
3. Women are willing to go an extra mile	35.4	57.4	-22.0**
4. Women bring sensitivity to human relations in decision making	32.0	61.3	-29.3***
5. Women pay greater attention to details	33.3	34.9	-1.6
6. Women focus on the decision making process and not just the outcome	66.7	62.3	4.4

Notes: *** represents statistically significant at least at the 1 percent level.

** represents statistically significant at least at the 5 percent level.

* represents statistically significant at least at the 10 percent level.

The results presented above indicate that male workers, in general, do not perceive the special contributions women workers make at the work place to the same extent as women do. In a separate analysis not reported here, we found that the male workers do not perceive these contributions very important. As a result, male managers are not appreciative or enthusiastic over the special traits women bring to workplace, as given in Table 4. Statistically significant differences in opinions between males and females were observed in four areas: (i) compassion/care in decision making, 73 percent of females agreed that they bring compassion and care in decision making while only 51 percent males saw this behavior in female managers (difference in proportions is significant at least at the 0.01 level); (ii) different perspective to business problems, 74.2 percent of females versus 56.9 percent of males agreed that female workers bring quite different perspective to business problems (difference in proportions is significant at least at 0.10 level), (iii) 57.4 percent of females versus 35.4 percent of males agreed that women are willing to “go an extra mile” and that they put forth additional efforts for the success of the organization (difference in proportions is significant at least at 0.05 level), and (iv) 61.3 percent of females versus 32.0 percent of males agreed that women are more sensitive to human relations in the workplace (difference in proportions is significant at least at 0.01 level). Almost an equal proportion of females and males agreed that females pay greater attention to details and focus on process rather than just results.

4. Strategies used by Female Workers in Coping with Gender Bias

The study found that (Table 5) 95.5 percent of female versus 76.6 percent of male respondents agreed that gender bias exists in their organizations, but that it does not affect them personally (difference in proportions is significant at least at 0.01 level). Working harder than men to advance at the same rate as men, was the strategy

recommended by 57.5 percent of female managers and 68.6 percent of male managers (difference in proportions is not statistically significant). Another approach that female managers use is to quit their jobs and find other employers who are more considerate of gender issues (65.6 percent of females versus 86.0 percent of males, difference in proportions is significant at least at 0.01 level). Almost an equal proportion of female and male workers (68.2 percent of females and 66.7 percent of males) believed in waiting and hoping that their day will come for equality in the work place (difference in proportions not statistically significant). About 49.0 percent of male and 57.6 percent of female workers agreed with remaining silent or that there was no point in “rocking the boat.” The approach of challenging gender bias individually was recommended equally by both genders (67.3 percent of male and 64.1 percent of female workers, difference in proportions is not statistically significant).

However, challenging gender bias collectively was recommended by 72.0 percent of male and 39.4 percent female workers (difference in proportions is statistically significant at least at the 0.01 level). Also, taking a legal action against an employer that discriminates on the basis of gender was considered appropriate by more male workers than female (46.9 percent of females and 68.9 percent of males, difference in proportions is statistically significant at least at the 0.05 level). Accepting a slower rate of advancement as a way to deal with gender bias in the corporation was agreeable to only 57.6 percent of females, while 86.0 percent of male workers thought this was appropriate (difference in proportions is statistically significant at least at the 0.01 level).

Table 5: Strategies used by Female Workers in Coping with Gender Bias

	Percentage of respondents agreeing		DIFFERENCE (Male-female)
	Male	Female	
1. Gender-bias exists in my organization but I don't believe it affects me.	76.6	95.5	-18.9***
2. Females wait and hope their day will come.	66.7	68.2	-1.5
3. Females simply move to another organization.	86.0	65.6	20.4***
4. Females challenge at individual level, question policies and practices.	67.3	64.1	3.2
5. Females just remain silent to get along. There is no point rocking the boat.	49.0	57.6	-8.6
6. Females start accepting slower rate of advancement.	86.0	57.6	28.4***
7. Females have to work harder than men to be advanced at the same rate.	68.6	57.5	11.1
8. Females take legal action against the organization that discriminates.	68.6	46.9	21.7**
9. Females challenge collectively at	72.0	39.4	32.6***

organizational level.			
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Notes: *** represents statistically significant at least at the 1 percent level.

** represents statistically significant at least at the 5 percent level.

* represents statistically significant at least at the 10 percent level.

The research findings suggest that men consider it quite appropriate for women to accept a slower rate of advancement in rank, change their job, or work harder than men in order to cope with corporate discrimination. These approaches breed further discrimination. However, a large proportion (95.5 percent) of female workers believe, that the gender bias does exist; however, they believe they are not affected by this bias. Further research is needed to explore why females workers feel that they are not personally affected by it.

Summary and Conclusions

This study provides insights into gender issues faced within Japanese business organizations. Conclusions based on the results of the study can be summarized as follows:

- Female managers in Japan assess the managerial skills of women more positively than do their male counterparts.
- Female managers perceive that business organizations in Japan are male-dominated and little is done for their advancement or to help them fit into the business culture.
- Female workers in Japanese businesses perceive that they make many positive contributions to the workplace, showing compassion and care in decision making, expressing willingness to go an extra mile, being sensitive to human relations, and offering a fresh perspective to business problems. However, men to a significantly lesser extent recognize these contributions.
- Females' using legal means against accepting a slower rate of advancement to cope with gender-bias is not popular in Japan. Switching jobs, waiting and hoping that the situation will improve, accepting the situation as it is, and working harder than men are more acceptable approaches in dealing with the problem. A greater percentage of males than female workers believe in these approaches.

Recommendations

Though women are accepted in business organizations in Japan, barriers exist for their advancement to upper management positions. To reduce these barriers, significant changes in the attitudes of male and female managers along with organizational and cultural changes are needed. Instead of waiting for others to change, based on the findings of this study, a few recommendations can be made to women who wish to advance into upper management positions. Some steps that women can take to better their chances of career success include:

- Women should urge that men and the workforce in general be informed about studies that demonstrate the value of women's managerial styles.

- Women should participate in organizational politics, aligning themselves with the individuals believed to be the next leaders in the firm. They should be prepared to challenge an inhospitable corporate culture.
- Men should be asked to attend workshops and training sessions that discuss how diversity in workforce is conducive to greater creativity, better decisions, and ultimately greater profitability. A recent study of Fortune 500 companies shows that companies with the highest representation of senior women had a 35% higher return on equity and 34% higher return to shareholders than companies with the fewest women near the top [Fortune 2004].
- Top management in organizations need to understand special traits women bring to workplace along with their special needs as employees—needs which should ultimately be regarded as societies needs (e.g. maternity and paternity leave).
- Business organizations can assist females in their advancement by playing a proactive role in creating a more female-friendly culture that includes visible senior management commitment to gender issues, aggressive recruitment of women at all levels of management positions, greater exposure to women of the upper management activities, mentoring, work-site childcare facilities, monitoring their job satisfaction, broadening their experience via job rotation, and professional development via training.

This study indicates that both men and women have a lot to contribute to the effective management styles of the future corporate world. The study also shows that both men and women have different traits and behavior patterns and that these traits are helpful in creating an excellent work environment. However, men think their leadership style is “command and control” while women think their style is “interactive.” Clearly this is linked to the socialization of men and women. No one style is the “ideal style” of management. There are situations when one style works better than others and both men and women are capable of both styles. A combination of the two styles so that business leaders are both efficient and effective requires teamwork of men and women.

References

- Adler, N.A., and Izraeli, D.N., (1994). *Women Managers in a Global Economy*. Blackwell Publishers; Cambridge, MA.
- Chunichi Paper Oct. 12, 2000.
- Fortune*, “More Women, More Profits,” February 9, 2004, p. 22.
- Gupta, A.K., Koshal, M., and Koshal, R.K., (1998). “Women in Management - A Malaysian Perspective,” *Women in Management Review*. 13:1:11-18.
- Gupta, A.K., Koshal, M., and Koshal, R.K., (1998). “Women Managers in India,” *Equal Opportunities International*. 17:8:14-25.
- Hunsaker, J. and Hunsaker, P., (1986). *Strategies and Skills for Managerial Women*. SouthWestern Publishing; Cincinnati, OH.
- Inoue, T., (1992), “Introduction to the Women’s Study,” Yu-hi-kaku.
- Lau, S., and Kuan, H., (1998). *The Ethos of the Hong Kong Chinese*. The Chinese University of Hong Kong, Hong Kong.

- Leon, C.T., and Ho S.C., (1994). "The Third Identification of Modern Chinese Women: Women Managers in Hong Kong," *Competitive Frontiers*. Chapter 3, as quoted in Adler, N.A., and Izraeli, D.N. (eds.), (1994). *Women Managers in a Global Economy*. Blackwell Publishers; Cambridge, MA.
- Leon, C.T., and Ho, S.C., (1994). "The Third Identification of Modern Chinese Women: Women Managers in Hong Kong," Chapter 3, *Competitive Frontiers*.
- New York Times (2003), "Japan's Neglected Resource: Female Workers," July 25, 2003.
- So Stella, L.M., and Young, K., (1991). "A Study of Women's Abilities in Managerial Positions: Male and Female Perceptions," as quoted in Adler, N.A. and Israeli, D.N. (eds.), (1994). *Women Managers in the Global Economy*. Blackwell Publishers; Cambridge, MA.
- Stead Bette, A., (1985). *Women in Management*. Prentice Hall Publishers.
- World of Work: The Magazine of the I.L.O., (1998). "Will the Glass Ceiling Ever Be Broken? Women still lonely at the top." February 24:2:6-7.
- Yamada, Y., Koshal, R., Miyazima, S., and Koshal, M., (2002). "Role of Gender in Wage Determination in the Production Sector in Japan." *Perspectives on Global Development and Technology*, 1:3-4:251-268

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