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Comparison of perceptions about women managers working on construction sites

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Abstract

Recently, women's social participation has increased. In Korea, the proportion of women in each field is increasing, including that involved in architecture engineering. However, most women who are engaged in construction engineering tend to avoid working on construction sites. Therefore, the proportion of women managers working on construction sites is very low. Despite these problems, there are few studies on the situation of women working on construction sites. The purpose of this study is to examine the reasons why women managers avoid working on construction sites and to compare the perception about women managers working on construction sites. By doing this, construction site organization management methods could be suggested for improving the proportion of women managers working on construction sites.

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1. Introduction

1.1. Background and purpose

The participation of women in society is growing worldwide. However, women's social participation in Korea is lower than in Western societies [1]. In particular, the proportion of women is significantly lower in the construction industry where traditionally women's participation has been low. According to the data published on May 28 [2], 2018 by the Korea Economic Research Institute, the proportion of women workers in top 600 listed companies (excluding finance and insurance companies) is 23.7%, but the proportion of women workers in the construction industry is 9.5%, which is the lowest among all industries.

The construction industry is aware of this problem and is continuously making efforts to increase the proportion of women workers. Nevertheless, the proportion of women workers in the construction industry is still very low. Among the top five construction companies, the proportion of women in the total number of regular employees in 2017 was 10.7% for Samsung C&T, 6.1% for Hyundai E&C, 8% for Daewoo E&C, 5.8% for Daelim, and 6.4% for GS E&C [3]. It seems that the gender imbalance problem is particularly difficult to solve in the construction industry.

A greater problem is that most women who majored (or are majoring) in construction continue to avoid working on construction sites. To solve this problem, we need to research the reasons why women avoid working on construction

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sites, but there are few studies on women managers working on construction sites. Therefore, this study aims to compare the perceptions of men and women on women managers working on construction sites to investigate the reasons why women managers avoid working on construction sites.

1.2. Study scope and method

The purpose of this study is to compare the perceptions of men and women on women managers at construction sites. Thus, a questionnaire survey was first conducted for men managers working on construction sites in Daegu and Gyeongsangbuk-do to examine how men perceive women managers working on construction sites. In addition, to examine the perceptions of women on women managers at construction sites, a questionnaire survey was conducted for female students who were prospective graduates in construction-related departments of universities. Information on women workers

1.3. Current status of women workers

As shown in Table 1, the number of women workers in the Korean labor market has increased, as compared to the past, and the economically active women population has increased [4]. However, even though the wages of women workers are increasing, the wage gap between men and women workers has not decreased, but rather increased (see Table 2) [5]. In other words, the gender imbalance still exists in the labor market [6].

Table 1. Changes in economically active women population and participation rate

Classification	2007	2009	2011	2013	2015
Women population over 15 (million)	20.1	20.5	21	21.5	22
Economically active women population (million)	10.1	10.1	10.4	10.8	11.4
Women's economic activity participation rate (%)	50.2	49.2	49.7	50.2	51.8

Table 2. Changes in the ratio of women's monthly salary to men's monthly salary

Classification	2011	2012	2013	2014	2015
Monthly salary of men workers (thousand KRW) (A)	2,444	2,569	2,664	2,761	2,837
Monthly salary of women workers (thousand KRW) (B)	1,548	1,654	1,705	1,742	1,781
Ratio of women's monthly salary to men's monthly salary (%) (B/A)	63.3	64.4	64	63.1	62.8

1.4. Characteristics of work places preferred by women [7]

Companies with a high proportion of women workers have one characteristic in common: they operate a program for work-family balance. For example, Lotte Shopping with 68.1% women workers has a child care leave program, which allows women workers to take a leave around the time when their children enter the elementary school. They also have a restart education program to support reinstatement after the child care leave.

CJ Freshway with 57.3% women workers support the artificial insemination surgery expenses for new infertile couples without children, give presents to women workers who gave birth, and operate a child care leave program to prevent career interruptions during pregnancy and childbirth.

LG Household & Healthcare with 56.3% women workers have continuously reformed their systems and organizational culture to eliminate the male-dominated culture and gender discrimination and to establish management based on respect for women.

1.5. Special nature of construction sites and women

The construction period is crucial in the construction industry. If the construction period is delayed in public construction works, the constructor must pay liquidated damage for the delay. Thus, rush works are frequently performed to meet the construction deadline at construction sites. During rush works, the site managers must work even at night and during the weekend.

Contrary to this special nature of construction sites, women place great importance on work-hour compliance. According to the “Basic Analysis Report on Korean Education & Employment Panel” announced in November 2015 [8], the first factor on which women place the highest importance is regular work hours and the third factor is five-day workweek.

2. Comparison of perceptions on women managers at construction sites

2.1. Survey overview

To compare the perceptions of men and women on women managers at construction sites, a questionnaire survey was performed for men first. The participants were 50 men managers at construction sites in Daegu and Gyeongsangbuk-do. For women, 50 female prospective graduates in construction-related departments (construction and construction engineering departments) of the universities in Daegu and Gyeongsangbuk-do were surveyed. The survey period was from April to June in 2018.

The questionnaires were composed of large three parts. The first part was only for male participants and was related to the perception on women managers working on construction sites. The second part was related to the perception of women managers at construction sites. The third part was related to what needs to be improved for work on construction sites. The second and third parts were for both men and women.

2.2. Perceptions of men managers on women managers at construction sites

Among the 50 men managers surveyed, only 16% had experience working with women managers at construction sites. Regardless of their experience of working with women managers at construction sites, most of the male managers were positive about women managers at construction sites (see Fig. 1). However, most of them said that the proportion of women managers at construction sites is not increasing, as shown in Fig. 2.

Fig. 1. Perceptions on women managers at construction sites

Fig. 2. Perceptions on the increase in the proportion of women managers at construction sites

2.3. Comparison of perceptions on women managers at construction sites

Regarding the advantages of working on construction sites, both men and women chose high salary as the first advantage. Men chose “active” and women chose “career-based treatment” as the second advantage. This shows that there are differences between men and women in perceptions on the advantages of working on construction sites. Regarding disadvantages of working on construction sites, men chose “irregular work on holidays” and women chose “gender discrimination” as the first disadvantage. This shows that there are differences between men and women in perceptions on the disadvantages of working on construction sites, as well.

Regarding the advantages of women managers at construction sites, there were large differences between men and women in perceptions on the learning ability and job performance ability, as shown in Fig. 3. Men considered learning ability as an advantage of women managers, whereas women considered job performance ability as an advantage. Furthermore, regarding the disadvantages of women managers at construction sites, both men and women chose lack of confidence as the first disadvantage, as shown in Fig. 4. However, clear differences appeared between the perceptions of men and women regarding responsibility and communication ability. Men considered lack of responsibility as a disadvantage of women managers at construction sites, whereas women considered lack of communication ability as a disadvantage of women managers at construction sites.

Fig. 3. Advantages of women managers at construction sites

Fig. 4. Disadvantages of women managers at construction sites

2.4. Measures to improve preferences for working on construction sites

We surveyed what needs to be improved to improve women managers' preference for working on construction sites. Men placed the highest priority on changing women's attitude of avoiding working on construction sites and improvement of working conditions, whereas women placed the highest priority on the improvement of the situation of gender discrimination at construction sites.

Fig. 5. Improvement measures

3. Conclusions

Men managers and female prospective graduates of construction-related departments were surveyed to compare perceptions of men and women on women managers at construction sites. The survey results show that both men and women are positive about women managers at construction sites. However, the surveyed men and women showed differences in their perceptions on the advantages and disadvantages of women managers at construction sites. Women regarded multiprocessing ability as an advantage of women managers, whereas men regarded learning ability as an advantage of women managers. As for disadvantages, women regarded lack of communication ability as a disadvantage of women managers, whereas men regarded lack of responsibility as a disadvantage of women managers.

Men and women also showed large differences in their opinions about how to improve gender imbalance. Men considered that changing women's attitude of avoiding working at construction sites is important, whereas women considered that improvement of the situation of gender discrimination at construction sites is important.

To summarize the results above, men and women had different perceptions about women managers at construction sites. Therefore, the most important precondition for increasing the proportion of women managers at construction sites is to recognize the differences in perceptions between men and women.

It is difficult to apply the results of this study to all construction site managers because they were obtained from questionnaire surveys on men managers at construction sites and female prospective graduates in construction-related departments of universities. Therefore, further research on women managers is necessary in the future. The results of this study will assist construction companies in their organizational management of women managers at construction sites.

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