

# Gender Bias in the Workplace: Should Women be Marginalized in Engineering Job?

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**Abstract.** Research observing women marginalization in the workplace viewed from the end-users have not been widely conducted. This article discusses about gender bias in the workplace from the perspective of the end-users of vocational higher education in terms of first, the companies' policies in the salary payment and second the availability of companies' policies in fulfilling the gender needs for male and female employees graduating from vocational schools. The research employing gender analysis was conducted in the Ex-Residency of Surakarta, Central Java Indonesia. The data were collected through documentation studies. The result shows that both male and female entrepreneurs have gender-biased view of women's and men's positions within the companies. Consequently, women's salary tends to be lower than that of men for the same job and the companies were still not responsive to the different needs of women and men. Accordingly, local government should supervise the companies to implement gender mainstreaming in the workplace, especially in the employees' career development and give rewards to companies implementing gender equality and otherwise give punishment to companies which have marginalized women in the workplace.

## 1. Introduction

Although gender-mainstreaming has been echoed by governments of many countries, gender bias is still ubiquitous, not exceptionally in the workplace. In engineering work-field, women merely represent about 15 percent of the employment and nearly 40 percent of female engineers leave engineering. Hiring managers — both men and women — are more likely to prefer male over female candidates for certain STEM (science, technology, engineering and math) jobs [1]. These facts show that gender bias in the workplace does exist. Furthermore, an engineer is 'expected' to be a man, whereas a female engineer is a deviation, both professionally and as a woman. The engineer as a man is also a statistical norm that shapes our stereotypical expectations. We think of a man when we hear the word 'engineer' because most engineers are men [2]. It is frequently claimed that women who enter engineering have to 'fit in' to 'a masculine culture' [3].

The research in various countries, including in Indonesia shows that women tend to be marginalized in technical jobs. Gender-stereotype, in which women are positioned in jobs relating to domestic sphere still occurs. There are three types of gender bias in workplace namely "prove-it-again bias", "tightrope bias" and the "maternal wall" [1]. These mean that women have to look more professional and demonstrate technical prowess at all times to receive the same respect as a male



engineer, women must operate within a narrow range of acceptable behavior that is neither too feminine nor too masculine to avoid being branded "emotional", and the ideal worker is always available for work and that mothers do not — or should not — remain committed to their careers.

Another researcher found that gender blindness dominates organizational male cultures in spite of an increasing number of women in management positions [4], and sexual orientation-based and gender identity discrimination is a common occurrence in many workplaces across the country [5].

Men earn more than women at all levels of engineering in New Zealand. Women are offered lower starting salaries and the gap continues throughout their life course, reaching a peak for women between the ages of 45 and 49 [6]. Such practice shows the unequal opportunity to certain positions and career development. Research observing women marginalization in the workplace viewed from the end-users have not been widely done.

This article discusses about gender bias in the workplace based on documentation studies in terms of first, the companies' policies in the salary payment regarding male and female employees graduating from vocational schools, and second the availability of companies' policies in fulfilling the gender needs for male and female employees graduating from vocational schools.

## **2. Methods**

The research was conducted in the Ex-Residency of Surakarta, Central Java Indonesia. It is the second largest city after Semarang, the Capital City of Central Java Province. In Surakarta there are many industries and it is presumed that there are still many gender biases occurring at the companies regarding their workers. Gender bias at the workplace is an iceberg phenomenon and it's difficult to proof. Company managements frequently deny it. Therefore, the data of the research were collected through documentation studies, from previous research regarding gender bias and gender violations taking place at the workplaces.

## **3. Research Findings**

The research findings are dealing with two major problems discussed in this article, i.e. the companies' policies in the salary payment regarding male and female employees graduating from vocational schools and the availability of companies' policies in fulfilling the gender needs for male and female employees graduating from vocational schools.

### *3.1. Companies' policies on payment*

The research reveals that there is no difference in companies' policies regarding salary payment to male and female employees graduating from vocational schools for the same jobs due to the stereotype among the companies assuming that women are more appropriate for certain jobs and occupations and vice versa. Gender stereotype can produce gender bias in the work settings and therefore obstruct women's career and even becomes the basis of biased evaluative judgments and discriminatory treatment of women in work settings [7].

One of the gender-bias problems happening to the employees graduating from vocational schools is the assumption that a woman is (always) single in her status, so that her job health insurance is merely valid to herself, not for her family. This occurs because of the assumption that the one who is responsible in a family is a husband. This occurs because the cultural assumption that men are the breadwinners, while women take care of the household, is still very strong in Indonesian society. As a result, when women are employed, their position is assumed to be merely that of an 'additional' breadwinner. In Indonesia, according to the ILO, women represent approximately 38% of the work force in the civil service. More than a third of the women do domestic works, such as taking care of the households and nurturing. These jobs are paid relatively low and therefore women overall tend to earn less than men [8].

Indonesia in 2015 in the survey conducted by World Economic Forum, Indonesia is positioned on the rank of 114 out of 145 countries in economic participation and opportunity, on the rank of 112 in

the labor force participation with the score 0.62 (54% female and 86% male). Whereas for wage equality for similar work, Indonesia is on the rank of 67 with the score 0.65 [9].

There are three issues in the project of wage gap of gender in Indonesia, first focuses on collective agreement. In manufacturing sector Cost Benefit Analysis (CBA) makes inventory of housing allowance and secondary facility such as housing allowance and health insurance. For instance, the CBA of the Fish Marine Company, which has already uploaded to [www.gajimu.com](http://www.gajimu.com), states that the housing allowance for men is IDR 20,000, for women IDR 10,000 and for widows IDR 15,000. This is the kind of difference that we will try to find in other CBA's and address through the gender pay gap campaign. Second, the gender pay gap in the informal sector such as domestic workers (house maid, driver, gardener, cleaning service, nanny). There is a difference in the income for women and men in domestic workers sector, again with the assumption that men are breadwinners. In addition, many works in informal sector is typical to men or women. For example drivers are mostly men and nannies are mostly women. The campaign will focus on equal pay for equal work. Third, the wage differences between different sectors (e.g. administrators in mining get higher wages than administrators in the garment sector). This has become an option which we can now show, based on the data. In the mining sector, where the majority are men, the wages are higher than that for office workers of whom the majority is female. These gender pay gaps between the sectors can now also be demonstrated, using the data of Wage Indicator [10].

In 2016 the international website *Qerja.com* conducted a survey on wage or salary gap to male and female in Indonesia. A survey by Qerja revealed that male employees generally receive 34% more than female employee in Indonesia. Moreover, the number of male managers in various industries are higher than female managers. Learning the practice that has been going on in the five most favourite industries – banking and financial services, consulting and legal services, media, mining and retail, it is found that all industries value their male employees more than the female.

Below is a table of the range of wage/salary indicating the gap undergone by women in five favorite industries [11].

**Table 1.** Range of wage/salary in five favorite industries

Industry	Female		Male	
	Average Female Salary	Range of Female Salary	Average Male Salary	Range of Male Salary
Banking & financial service	Rp 9.9 million/month	Rp 5 million-Rp 14 million/month	Rp 12 million/month	Rp 7 million-Rp 15 million/month
Consulting, research & legal services	Rp 15 million/month	Rp 6.4 million-Rp 14 million/month	Rp 21 million/month	Rp 11 million-Rp 25 million/month
Retail & wholesale trading	Rp 9.4 million/month	Rp 4.9 million-Rp 14 million/month	Rp 11 million/month	Rp 6 million-Rp 15 million/month
Mining, oil & gas	Rp 21 million/month	Rp 10 million-Rp 21 million/month	Rp 24 million/month	Rp 13 million-Rp 30 million/month
Media, entertainment & advertising	Rp 8.7 million/month	Rp 4.2 million-Rp 11 million/month	Rp 11 million/month	Rp 7 million-Rp 14 million/month

\*Based on the interview and survey from Qerja.com in 2016. The actual salaries can be higher of lower than  
Source: Qerja.com/2016

According to the Central Statistics Agency of Indonesia for the period of February 2017, there is a difference between the salary paid to male and female workers. The overall salary/wage of male workers is higher than that of the females. The following is the table of monthly wage/salary payment to male and female workers.

**Table 2.** Monthly wage/salary payment to male and female workers in Indonesia

Sector	Wage to male workers	Wage to female workers
Agriculture	1,93 million	1,14 million
Mining	4,5 million	3,5 million
Finance	3,7 million	3,6 million
Electricity, Gas, Water	4,4 million	4,7 million
Industry	2,7 million	2 million

*Source: BPS, February 2017*

### 3.2. Availability of companies' policies on specific needs

Several companies have attempted to fulfill the gender needs to male and female employees. Some health-examination facilities are provided to female employees when they are having pregnancy for their first and second pregnancies, leaves for giving birth of the first and second children and the insurance for giving birth for the first and second children. However, a number of companies have not provided a breastfeeding room to women who want to give breastfeeding to their children.

Female workers (graduates of senior high schools and vocational high schools) particularly working at textile industries state that they can't possibly ask for a leave for their pregnancy in accordance with the policy set out by the government [12]. The research reveals that one of the companies will even expel the female employees without giving them severance if they get pregnant. Moreover, if the company permits the female employee to get back to work, they should restart their carrier from zero (contract workers with adjusted wages).

Besides the leave entitlement of giving birth, which is not in accordance with the government policy, the right usually not fulfilled by the company is that of female workers for not being permitted to go home for breastfeeding their babies. If they are allowed, they should follow complicated procedure and even can lead to payroll deduction. The company does not provide day care and breastfeeding facilities [12].

Women Research Institute (2016) finds problems frequently encountered by female workers at their workplace, i.e. the company's bathrooms that don't fulfill the hygienic standard, insufficient lighting, unkind health workers, and unavailable dining rooms. Moreover, there are also other problems such as the domination of male workers at the Work-Unit Representative and Labor Union and the low representation of female workers in the organizations of labor union. The problems are still frequently found in the companies having less-good policies [13].

One of the jobs being underestimated is being domestic workers. In fact, the job has become an alternative to those graduating from Senior High Schools and Vocational High Schools having no qualified skill, especially women. In addition to becoming domestic workers, it also covers taking care of children and becoming private nurses. These workers (i.e. housekeepers, nannies, personal care aides, and home health aides) help raise children, care for the elderly and people with disabilities, and free up their employers to engage in other types of productive work. In addition, because arrangements are often informal, domestic workers are subject to coercive tactics on the part of employers, sexual and other types of harassment and threats. Isolated workplaces, where the worker often works in the employer's home with no co-workers, increase the likelihood of domestic workers to withstand abuse and contribute to the poor health outcomes of this population. Domestic work can be hazardous, with potential exposure to toxic chemicals, injuries, and long hours on the job [14].

As a matter of fact, male and female workers deserve proper place and facilities to support their jobs. The lack of legal protections and social vulnerability workers experience increases of the chance that they will be exposed to risky situations that put their health in jeopardy on the job. Workers are described being afraid of speaking up for better conditions because of undocumented status or economic constraints. Repeated experiences of unfair treatment, humiliation, and discrimination within the workplace can lead to chronic stress that can impact the mental health and well-being of workers [14].

#### 4. Conclusion

The research result shows that gender-biased view of the position of women and men within the companies still exists. As a result, women's salary tends to be still lower than that of men for the same job or position. Regarding the companies' policies on specific needs, many companies were still not responsive to the different needs of women and men. In other words, women are still marginalized in engineering job. Even one of the sexes is still harmed in their health during their work due to the presumption that male and female workers are the same. Accordingly, local governments should supervise the companies to implement gender mainstreaming in the workplace, especially in the employees' career development. Moreover, the local governments should also give rewards to companies implementing gender equality and otherwise they should also give punishments to companies which have marginalized women in the workplace.

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