

The Analysis of Workplace Adaptation Factors for Women in the Construction Industry

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Abstract—Construction is a dynamic industry and continues to grow rapidly, thus requiring an increase in the workforce regardless of gender. However, women in the construction industry face barriers such as: discrimination, sexual harassment, wage disparities; and challenges such as: work pressure, working hours, and masculine culture. Therefore, an appropriate workplace adaptation strategy is needed. The purpose of this study is to analyze the factors that make it easier and more difficult for women to adapt in the construction industry. This study uses a qualitative approach with a systematic literature review method. Searching for articles through the Publish or Perish application on the Scopus platform, there are 30 articles from 9 international journals that meet the inclusion and exclusion criteria. The result is that there are 3 factors with details of 24 indicators that make it easier and more difficult for women to adapt in the workplace, namely 8 indicators of individual adaptation factors, 11 indicators of interpersonal skills factors, and 5 indicators of organizational support factors. Thus, to successfully adapt in the workplace, it requires not only the adaptability and interpersonal skills of women, but also the importance of organizational support, both by related companies and government policies.

Keywords—workplace adaptation, women in construction industry, women in workplace

I. INTRODUCTION

Construction is an industry that contains activities to create or build facilities and infrastructure in a tangible form to achieve certain goals. These activities include procurement of goods, material development, project documents, human resources, technology, and government/private institutions[1]. The industry continues to grow rapidly and is predicted to increase globally by 85% (\$15.5 trillion) by 2030 [2]. This requires an increase in the workforce, both skilled and managerial workers [3]. On the other hand, the construction industry faces challenges in the form of an aging workforce, declining interest among young people in construction, and the trend in secondary education that produces unskilled workers [4]. Thus, gender responsive workforce recruitment is essential

in the construction industry if it is to build and maintain a sustainable workforce throughout the 21st century [4].

However, to have a career in the construction industry -- which is dominated by men and known for its tough work -- women must face various obstacles and challenges. There are wage disparities, sexual discrimination and harassment, lack of organizational support [5], as well as differences in job positions [6]. As they -- who are minorities -- just enter the workforce, they are challenged to adjust to a masculine culture and harsh environment, long working hours, high job pressures, excessive workloads, unrealistic deadlines, and needs. Security [7]. As a result, women show low levels of job satisfaction [8], experience fatigue, stress, physical and mental health disorders, and cause lower self-efficacy [9,10].

To face these obstacles, women who have just graduated and are about to enter the construction industry need to adapt well [11]. However, according to Sirotiak and Sharma, the adaptability of female graduates in the construction industry is still lacking. In fact, a good workplace adaptation is important because it is a potential for their future success in the workplace. Although adaptability is not a panacea for work-life problems, it has the potential to overcome inevitable contradictions in the workplace [13].

The majority of research related to women in the construction industry discusses career challenges [12,14,15], career development [16], and the competencies needed by women [13,17-22]. Meanwhile, the workplace adaptation needed by young female graduates has not been carried out. So, the purpose of this study is to analyze the factors that make it easier and more difficult for women in the process of adapting in the construction industry.

II. RESEARCH METHODS

A. Research Strategy

This study is based on the Systematic Literature Review method by focusing on previous empirical studies on the adaptation of women in the workplace in the construction

industry. In this study, the data is taken based on the search for articles using the Publish or Perish application.

B. Research Criteria

Research criteria are needed to select and filter articles that will be used as research objects. In this study, the selected articles must meet the following requirements:

- Language : English
- Publish Year : 2011 – 2021
- Keywords : workplace adaptation, women in workplace, women in construction industry
- Platform : Scopus

III. RESULTS AND DISCUSSION

A. Results

After doing a search using Publish or Perish, we got 30 articles from 9 international journals that met the research criteria.

Of the 30 articles, it was classified that the factors that affect women's adaptation in the workplace are individual factors, interpersonal factors, and organizational factors.

TABLE I. FACTORS OF ADAPTATION OF WOMEN IN THE WORKPLACE

Factor	Amount
Individual	8
Interpersonal	11
Organization	5

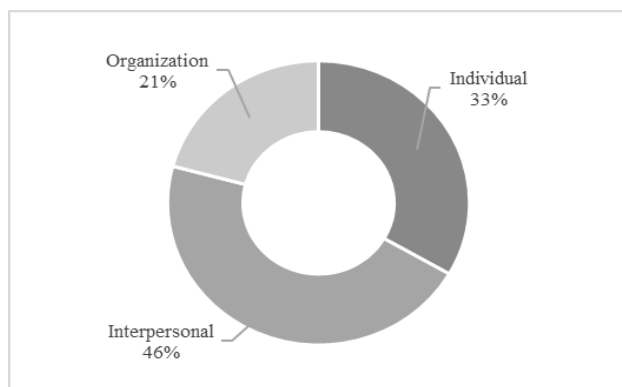


Fig. 1. Factors of adaptation of women in the workplace.

TABLE II. INDICATORS OF WOMEN'S ADAPTATION FACTORS IN THE WORKPLACE

Factor	Amount	Indicator
Individual	8	Emergency handling
		Handling work stress
		Solution to problem
		Handling work situations
		Learn new tasks, technologies and work procedures
		Interpersonal adaptability
		Cultural adaptability
		Physically oriented adaptability
Interpersonal	11	Cognitive ability
		Practical intelligence
		Originality
		Domain specific knowledge
		Openness
		Cognitive flexibility
		Emotional stability
		Cooperation
		Achievement motivation
		Sociability
		Social intelligence
Organization	5	Organizational Match
		Sexual Discrimination Prevention
		Organizational Training and Development
		Supervisor Support
		Women's Leadership

B. Discussion

From tables 1 and 2, as well as in Figure 1, in adapting in the workplace, especially in the construction industry, women are influenced by individual factors, interpersonal skill factor, and organizational factor. These three factors are interrelated and influence each other.

TABLE III. INDIVIDUAL FACTOR

No	Individual Factor Dimension	Examples in the Construction Industry	Source
1	Emergency handling	Women can act appropriately and decisively in emergency situations	[18]
2	Handling work stress	Women still feel calm at work	[23]
3	Solution to problem	Women can solve ambiguous and complex problems	[24]
4	Handling work situations	Women can easily adapt to certain situations	[22]
5	Learn new tasks, technologies and work procedures	Women can learn the skills needed	[25]
6	Interpersonal adaptability	Women can adjust to fellow coworkers	[26]; [11]
7	Cultural adaptability	Women can adapt to the existing culture	[27]
8	Physically oriented adaptability	Women can adapt to the physical environment	[28]; [29]

TABLE IV. INTERPERSONAL SKILL FACTOR

No	Dimensions of Interpersonal Factors	Implementation in the Construction Industry	Source
1	Cognitive ability	Women can use English or foreign languages in interacting and working	[30]; [6]
2	Practical intelligence	Women can solve problems they face from learning around them	[31]
3	Originality	Women can come up with smart and creative ideas according to the challenges they face	[32]
4	Domain specific knowledge	Women have special knowledge about certain scientific fields in the construction industry	[17]; [33]
5	Openness	Women can adapt to new environments and events	[13]
6	Cognitive flexibility	Women can accept sudden changes	[34-39]

TABLE V. ORGANIZATIONAL FACTOR

No	Dimensions of Organizational Factors	Examples in the Construction Industry	Source
1	Organizational Match	Organizations give comfort to women in the construction industry	[40]
2	Sexual Discrimination Prevention	Organizations carry out supervision in the workplace	[30]; [3]
3	Organizational Training and Development	Organizations develop creative ways of solving problems	[41]
4	Supervisor Support	The organization empowers supervisors to recruit and develop female staff	[20]
5	Women's Leadership	The organization presents female seniors as role models in the workplace	[37]

Individual factors are factors that come from within the individual. This includes career aspirations and planning, proactive personality, educational background, work experience and training, and other factors [28].

The interpersonal skill factor is a factor needed to be able to communicate, interact, build and maintain relationships with other people in various situations [28].

In addition to individual abilities and interpersonal skills, the organization also plays an important role in the process of

adapting the workplace for new employees [38]. With positive support from the organization/company to employees, it will produce a positive impact for both parties. When employees feel that the organization supports them, their socio-emotional needs will be met and tend to result in more positive work attitudes, including job satisfaction [22].

IV. CONCLUSION

To face the various obstacles and challenges faced, women need to adapt well. The influencing factors consist of individual factors, interpersonal skills factors, and organizational factors, each of which has certain indicators and dimensions. Therefore, support and cooperation from various parties are needed so that women can adapt well in the construction industry, so that it is expected to increase the country's productivity and create employment improvements.

This research is still far from perfect. So, for future researchers, they can examine how or how much these factors affect a woman's workplace adaptation in the construction industry.

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