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**PRODUCTIVITY AMONG INDONESIAN WOMEN ICT
PROFESSIONALS: THE ROLES OF SELF-ESTEEM**

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Abstract

As a worker, women and men are expected to achieve the same level of productivity. Nevertheless, existed gender inequity issues in ICT are considerable to be prominent factors regarding women worker's self-esteem. As once self-esteem is assumed to be associated with productivity, therefore it is necessary to observe in what extent does self-esteem predicts productivity among Indonesian women who works as an ICT professional. This study is aimed to examine the role of self-esteem toward productivity among Indonesian women works as an ICT professionals. Thus, this is also to briefly described the dynamic process of productivity that determined by demographic factors of women works as an ICT professional in Indonesia. Using snowball sampling, a set of questionnaire measuring Self Esteem (alpha: 0.787), and self-reported Productivity (alpha : 0.942) as well as several demographic factors was distributed to an eligible respondents. Furthermore, primary data that were collected from 73 eligible respondents: Indonesian women who works as an ICT professional, is being analyse using linear regression. As a result obtain through this study, self-esteem can predict productivity of Indonesian women who works as an ICT professional, as much as 5.5%. In the other hand, the 94.5% remains of their productivity are predicted by another factors excluded from this study.

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1. Introduction

As a multidimensional phenomenon, globalization does not only touch political, economic, social and cultural spheres of any society but also reconstructed the traditional way of living up the social world and human nature. In accordance, a wide array of discourse regarding humankind has emerged particularly in social world into extent in area of women and gender studies. During the past two decades, there is noticeably progressive shifting for women empowerment that consider to be interesting topic in studying gender equity. However, rectifying the notion of women empowerment in globalization has led to the increasing number of women involved in industrial sectors as well as in industry of Information and Communication Technology (ICT).

ICT industry is considered as one of the most dynamic sectors proven by the acceleration of increasing number of women involve in ICT domain. According to the data of the Statistics Indonesia (2018), based on a survey conducted in 2009-2012 showed an increase in the percentage of working women of total same age women, i.e. from 60.54% in 2009 to 60.67% in 2012. Furthermore, The data of Statistics Indonesia (2011) showed that there was a difference between male and female IT workers. Permanent male IT workers were 56.70% while the female workers were 21.21%. In addition, the contract male IT workers were 15.37% and the female workers were 6.72%. From such data, a significant difference between the male and female IT workers number can be observed.

The ILO's Global Employment Trends (2003) reported that women remained at the low participation rate in the working world, had a high unemployment rate, and paid for a steep difference than men. Kattara (2005) mentioned in his finding that female workers in general could work multitasking. However, during such situation, the women's emotion and feeling started to be active. If both issues were not controlled, female workers were not able to perform optimally in the organization and it would affect their work productivity.

High work productivity is a wish of each organization. In general, an organization would always want to improve its workers' work productivity in order to immediately reach the organization's purpose (Handoko, 2001). Sedarmayanti and Pd (2001), the work productivity was a comparison of output effectiveness (maximum work performance) and efficiency of an input (worker) which included quantity and quality within a certain timeline. Furthermore, Siagian (2002) construed the work productivity as an ability to obtain maximum benefits from available facilities and infrastructures by producing optimal or maximal output. However, the productivity assessment does not only observe the outcomes but also qualities produced by such employees. The work productivity can be assessed by actions taken by such employees in their work or how the employee performs her/his work (Sadili, 2006).

There are some extensive studies predicting work productivity. One of such studies conducted by Sedarmayanti, which mentioned that one of the factors affecting the work productivity was self-esteem. A productive individual was an individual who are sure of his self-ability and have self-esteem to actualize himself (Sedarmayanti, 2009). Moreover, according to Coopersmith (in Heatherton & Wyland, 2003), self-esteem is an assessment made by an individual, which shows how far such individual considers their ability, worth, success, and value. Along with Miller, Perlman, and Brehm (2007), that also stated that self-esteem was a personal evaluation on own self which resulted on feeling respectable. This however supported Rosenberg (1989) that once defined self-esteem as a positive or negative attitude of an individual to himself

(self), which designated to the thoughts and underlay a perception to feelings, i.e. the person's feeling on worth or value as a human. Rosenberg also claimed that there were three aspects regarding self-esteem known as physical self-esteem, social self-esteem as well as performance self-esteem

2. Problem Statement

The gender pattern in the information technology industry is predictably to be gender inequity issue. Women are not significantly represented in the information communication technology sector, especially in the high level positions. In several cases, some cultural stereotypes also shape the information communication technology sector. This cultural stereotype supports the general opinion as well as in Indonesia, which is known as a masculine perspective or culture. Despite of its multi-diversity, masculine perspective is still applicable in Indonesia, thus it provide the opportunity of arising gender inequity issues in Indonesia. Moreover, those culture are also prevail regarding the organization within all information technology industry and academic communities. In addition, the male superiority myth in the technology world, which is dominated by men, is also considered to affect the women's participation in the information technology industry (Tapia, Kvasny, & Trauth, 2004).

With regard to the stereotype pattern as well situation faced by woman ICT professional, it is necessary to accommodate women ICT professional' competencies and manage their productivity through their self-esteem, regardless of the adverse existing circumstances, particularly in their work environment.

3. Research Questions

Based on the profounding that work productivity is influenced by self-esteem, and woman self-esteem is somehow related to gender stereotype and cultural circumstances, this study expect to measure the role of self-esteem in predicting work productivity. Targeted to Indonesian women ICT worker in any industrial sector in Indonesia, the research question to be examine in this study are as follow: in what extent does self-esteem predicts productivity among Indonesian women who works as an ICT professional?

4. Purpose of the Study

This study is aimed to examine the role of self-esteem toward productivity among Indonesian women works as an ICT professionals. Thus, this is also aimed to briefly described the dynamic process of productivity that determined by demographic factors of women works as an ICT professional in Indonesia.

5. Research Methods

Using survey methods, this study was targeted to Indonesian woman work as ICT worker. regardless the competencies or formal educational background in Information communication technology. Thus, woman who are working related to ICT in ICT company or utilizing ICT, is eligible to be targeted respondents in this study. Using snow ball sampling, there was 76 women participating in this study.

The data of this research were collected by questionnaires as the data collection tool. The self-esteem, as independent variable in this research was measured using modified scale based on Rosenberg’s self-esteem scale that was explained by Rosenberg (1965), obtaining the reliability value of as much as 0.85. On the other hand, the work productivity, as dependent variables in this research was measured using a self-assessment questionnaire modified from Endicott work productivity scale by Endicott (1997), obtaining the reliability value of as much as 0.93.

The data analysis method of this research was a regression analysis. The regression analysis can be used to observe whether there is any effect or not, and how significant the effect of the self-esteem to the work productivity is..

6. Findings

The regression analysis outcome shows that the significance coefficient value is 0.047 ($p \leq 0,50$). Thus, the hypothesis is self-esteem significantly affects the work productivity of female IT workers. From the regression test results, the R square value is 0.055 (5.5%).The regression test result is shown in the following table 01:

Table 01. The regression test result of the self-esteem to the work productivity

Sig	R Square
0,047	0,055

Based on the regression analysis, the effect of self-esteem to the work productivity of 73 female IT workers respondent has a significance coefficient value of 0.047 ($p \leq 0,50$). It means there is an effect of the self-esteem to the work productivity of female IT workers. The regression test results on the R square value of 0.055 (5.5%). It shows that self-esteem has 5.5% effect to the work productivity of female IT workers. Meanwhile, the remaining 94.5% are affected by other factors excluded in this study. This results, however, are supported by a statement of Sedarmayanti (2009), who described that a productive individual was a person who had high self-esteem. Thus, the self-esteem might finally be applied to actualize theirself. Branden (1994) explained that self-esteem was a person’s trust to his ability to think, answer to the life challenges, and trust that they was entitled to be successful and happy. Furthermore, Coopersmith (1967) mentioned that one of the self-esteem aspects was ability. By ability, a person could show high performance to fulfill needs and accomplish achievements. Thus, Minchinton (1993) explained that a person with high self-esteem could design, plan, and materialize all expectations to be their life purposes optimally and maximally. The same opinion was delivered by Kenneth, Karen and Dion (in Bird & Melville, 1994) that once stated that an individual with high self-esteem would be able, in their work, to accept person who had different opinions. Thus, they would be more productive in their work. Felker (1974) also claimed the same opinion about one of the self-esteem components, i.e. healing of competence. The healing of competence is an individual’s feeling and assurance to their own ability that they will be able to accomplish the expected outcome.

Based on the empirical test on the respondents' demographical data, as described in the following table 02, it is revealed that respondents who have been promoted have higher work productivity than the respondents who have never been promoted.

Table 02. Description of the respondents' data based on their promotion.

Promotion	N	%	Empirical Mean	
			SE	WP
Yes	13	17,81	24,84	78,15
No	60	82,19	21,73	77,81

According to Anoraga (2014), promotion would make a worker proud if the company rapidly developed or even became famous publicly. This factor also encourages the worker's pride to their work apart of the new responsibilities an tasks that the worker has to manage. This pride is also a plus point for the company due to the worker directly or indirectly promotes the company and maintains the company's image before the public. The promotion here is one of the factors affecting the work productivity.

Furthermore, another empirical test on the demographic data of the respondents reveals that the respondents who do not have other activities after office hours, have higher work productivity rather than respondents who have other activities (Table 03).

Table 03. The description of the respondents' data based on other activities after office hour.

Other Activities	F	%	Empirical Mean	
			SE	WP
Yes	22	30,14	22,05	78,77
No	51	69,86	22,39	75,78

Kattara (2005) mentioned in his finding that female workers in general could work multitasking, but most of them had other activities. Thus, they did not focus on their work and it affected their work productivity. However contra-founding was found in this research, while those who has other activities over their working hours was claim their more productive than those who don't have other activities over their working hour. In this study, was not observe type of another activity that the respondent have, instead respondent marital status might be assumption to justify this current finding.

Another particular socio-demographic factor that relate to work productivity is salary. From the following table 04, the empirical test on the respondents' demographic data, it is known that respondents who have a monthly income of > 7 millions have higher work productivity than other respondents.

Table 04. The description of the respondents' data based on the monthly income.

Income	F	%	Empirical Mean	
			SE	PK
< 3,5 million	13	17,81	20,92	76,76
3,5 million -7 million	49	67,12	22,06	75,71
> 7 million	11	15,07	24,90	78,81

The salary earned by the respondents is one of the parameters for such respondents' economic status. It complied with the statement of Orth, Trzesniewski, and Robins (2010) that the socio-economic status could affect the self-esteem and it could in turn affect the work productivity of such respondents. In addition, Anoraga (2014) added that good salary caused the sense of sufficiency to fulfill their family life necessities, more significant. Therefore, there would be linear mutual feeling.

7. Conclusion

7.1. Conclusion

Based on the regression analysis on the effect of self-esteem to the work productivity of 73 female IT workers respondent, a significance coefficient value of 0.047 ($p \leq 0,50$) is obtained. It means that there is an effect of the self-esteem to the work productivity of female IT workers. The regression test results on the R square value of 0.055 (5.5%). It shows that self-esteem has an effect of 5.5% to the work productivity of the female IT workers. Meanwhile, the remaining 94.5% is affected by other factors excluded from this study.

7.2. Suggestion

The researcher expects the female IT workers may manage and apply the self-esteem and perceived organizational support to be better in completing their work. Therefore, it will significantly affect their work productivity. In addition, the researcher also expects the company can be more prudent in managing the workplace gender equality. Thus, the female IT workers feel that they are more respected and given an opportunity. It can encourage their self-esteem and perceived organizational support, which can in turn affect the employees' work productivity to reach the company's objectives.

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