Determinants of Women's Employment Participation Who Have Toddler in East Java During the Covid-19 Pandemic

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ARTICLE INFORMATION

Publication information

Research article

HOW TO CITE

Atmasari, Pratomo, D. S., & Badriyah, N. (2022). Determinants of Women's Employment Participation Who Have Toddler in East Java During the Covid-19 Pandemic. *Journal of International Conference Proceedings*, *5*(4), 12-20.

DOI:

https://doi.org/10.32535/jicp.v5i4.1908

Copyright@2022 owned by Author(s). on the results of binary logistic regression, Published by JICP it is known that age, education, area of



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Received: 4 October 2022 Accepted: 15 October 2022 Published: 15 November 2022

ABSTRACT

The current COVID-19 pandemic situation has had an unfavorable impact on Indonesia's employment issues, especially women's employment. Women's work participation is needed to help improve the family's economy during the pandemic. The presence of toddler the household will affect a woman's decision to enter the labor market, because women are faced with a choice between raising children or working. Using Susenas 2021 data, this study aims to examine the determinants of women's work participation who have toddler in East Java during the Covid 19 pandemic. Based it is known that age, education, area of residence, internet use, household poverty status, husband's employment status in East Java has a significant effect on the participation of women who have toddler in East Java during the Covid 19 pandemic. While the number of members has no significant effect. From this research, it is necessary to implement policies that make it easier for women with toddlers to enter the labor market that favors mothers with working toddlers such as policies on working time, sick leave, maternity leave, and exclusive breastfeeding.

Keywords: Biner Logistic Regression, Covid-19, Susenas, Toddler, Women's Employment

INTRODUCTION

The COVID-19 pandemic has had a negative impact on the socioeconomic order in Indonesia. Changes in the economic situation have finally become a major challenge for gender equality in Indonesia, because fundamentally the uncertainty of the economic situation has a worse impact on women than men (Doepke & Olmstead-Rumsey, 2021). Picker in Resmi, Pahlevi, and Sayekti (2019) suggested that gender equality is not only applicable in politics but also in business activities. The issue of gender equality that has received considerable attention is employment issues such as job opportunities, quality of work and income. Referring to the fifth SDGS goal by Bappenas concerning Gender Equality and women's empowerment, in increasing national development it should be obligatory to take into account the role of the female workforce.

The economic slowdown in East Java during the pandemic resulted in an increase in female unemployment rate in August 2021 by 0.17 percent compared to August 2020. When compared to February 2021, female unemployment rate increased by 0.93 percent (BPS, 2021). Based on Sakernas data in August 2021, there were 1.38 million women in East Java who were affected by the COVID-19 pandemic.

There is a very big difference between male and female LFPR. Male LFPR is at 84.46 percent, 28.35% higher than women at 56.11 percent (BPS, 2021). LFPR is dominated by men because of their role as the main breadwinner. Figure 1 shows that in August 2021 the Labor Force Participation Rate (LFPR) of East Java women decreased by 0.45% compared to August 2020.



Source: BPS Jatim, 2021

Figure 1. East Java LFPR by Gender, 2018-2021

There are several factors that influence the low LFPR for women in Indonesia, especially in East Java. Anker (1998) says that women, especially those who are married, have more considerations about their role in the household and family before choosing to enter the labor market. Cameron, Suarez, and Rowell (2019) stated that women's LFPR figures are still stagnant due to women's marriages and the presence of children which is a dilemma for women between staying to work or leaving their jobs. Maryati (2008) said that when a woman is married and has a toddler, the woman has a tendency to enter the labor market if her toddler is old enough so that it is safe to leave work or be taken to work.

Women have toddlers who enter the labor market as a complement to their husband's work in helping their husbands to fulfil the economic needs of the family. The complexity of the role conflict and the difficulty in allocating the time that will be faced between being a mother or being a worker. So, with the complexity of allocating the time faced by married female workers who have toddlers, especially during the Covid-19 pandemic, the factors that affect their participation in entering the labor market (in order to manage time to earn income for themselves and their household) become need to be researched.

LITERATURE REVIEW

According to time allocation theory, each individual has 24 hours a day that will be used to earn income or to perform other activities (Becker, 1965). The decision to work is basically a decision about how to use the time you have. Each individual can use the remaining time for leisure activities such as being active in social, cultural activities, taking care of the household, taking care of children or going on vacation while carrying out the individual's hobbies.

Borjas (2016) said that a person's choice to enter the labor market or not is closely related to the reservation wage she wants, a person's choice to work or not is also influenced by the amount of non-labor income owned by the individual. When non-labor income is greater, the choice not to work will be even greater. Borjas (2016) also said that every individual has a decision to work at least influenced by two factors, namely leisure and non-labor income. Leisure is a term that describes activities carried out daily that are not productive in nature.

Based on the theoretical model of time allocation and labor-leisure choice, the allocation of time on child and household activities affects the consideration of working and the number of hours worked by married women. The assumption that being a mother is required to prioritize her role in taking care of children and the household. Therefore, the allocation of time for household matters becomes larger and the number of hours worked has the potential to be reduced and even eliminated.

Anggraeni in Sulityowati (2021) states that the factors that influence the allocation of working time for married women, whether they work fully or not, are the characteristics of women, husbands, households, and location of residence. Where the presence of toddlers in the family has a relationship with the allocation of working time for married women. In addition, Anggraeni in Sulistyowati (2021) emphasizes that having children under five can reduce the tendency of married women to enter the labor market, either as part-time workers or full-time workers.

Maryati (2018) said that the allocation of time for married women who have toddlers is a complicated problem. Women are at a choice between using time for work or time to take care of their household. The participation of women having children under five is influenced by individual characteristics, namely age and education variables, household characteristics are indicated by the number of family members and household status, and the husband's work characteristics are indicated by the husband's employment status. According to Lusiyanti and Wicaksono (2020) women's work participation is influenced by educational factors and socio-demographic factors. Socio-demographic factors consist of age, marital status, area of residence, presence of children under five, status of head of household. In addition, Lusiyanti and Wicaksono (2020) said that the role of carrying out household tasks (taking care of children) is one of the main inhibiting factors for women's work participation. The chances of a woman with a toddler entering the labor market are about 8% lower. The results of this study support the previous study in which the work participation of women who are married and have young children will

decrease, which is caused by the high cost of child care (daycare), so that a woman ultimately has the option of taking care of her own children rather than paying for child care. expensive (Connelly, 1992).

Sulistyowati (2021) said that around 40% of married women aged 20-49 years have a tendency not to work. This is especially dominated by women who have children under five in their household. When they choose to enter the labor market, married women aged 20-49 years who live with their toddlers tend to work part-time or this is called underemployment.

RESEARCH METHOD

This study uses a statistical analysis tool binary logistic regression in answering the objectives of the study. The data used in this study is Susenas data carried out by the Central Statistics Agency in March 2021. The object of this research is married women who have toddlers aged over 10 years. Susenas is one of the surveys conducted by BPS to obtain data on a number of socio-economic indicators. Therefore, this study provides an assumption of independence between the units analyzed. The unit of analysis for the sample of women who had children under five was 6228 individuals.

The dependent variable in this study is a categorical variable which includes (1) Women who have toddler (as a reference category). (2) Women have toddlers who do not work. While the independent variables used in this study consisted of 1) age 2) Number of household members 3) education 4) area of residence 5) internet use 6) household poverty status 7) husband's employment status. The independent variable of age was divided into age above 30 years and age under 30 years (reference category). The variable number of household members is a continuous data variable and is not categorized. The education variable is divided into education above high school and education below high school (reference category). Residential areas are divided into urban and rural areas (reference category). The variable of internet usage is divided into using the internet (reference category). The household poverty status variable is divided into poor and not poor (reference category). The husband's employment status is divided into unemployed, working in the informal sector and working in the formal sector.

The general form of binary logistic regression used in this study is:

 $g(x) = \ln\left[\frac{\pi(x)}{1-\pi(x)}\right] = \beta_0 + \beta_1 Age + \beta_2 Edu + \beta_3 area + \beta_4 internet + \beta_5 number_houshold + \beta_6 Poverty + \beta_7 Husbend's_work + e$ (1)

which: β_0 = intersep $\beta_1, \beta_2 \dots \beta_7$ = parameters of each variable

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Explanation of the output from the results of binary logistic regression analysis in this study will be displayed through the value of the odds ratio which shows the relationship to the independent variable when other variables have a fixed value on the probability in each category of the logistic regression model (Greene, 2003).

RESULTS

Work participation of women with Toddlers in East Java

In this study, descriptive analysis was used to describe the situation and problems in each of the variables used. The following are the results of the calculation of variables regarding the characteristics of women who have children under five who work and do not work in East Java can be seen in Table 1 below:

Table 1. Characteristics of Women's Work Participation with Children Under Five in
East Java

		Women's Work Participation with Toddler	
		Don't work	Work
Age	Under 30 years old	50.1%	38.9%
	Over 30 years	49.9%	61.1%
Education	Under high school	56.6%	43.0%
	Above high school	43.4%	57.0%
Residential Area Classification	Rural	48.0%	39.7%
	Urban	52.0%	60.3%
Internet Usage	Not using	24.3%	19.1%
	Using	75.7%	80.9%
Number of Household Members	Less than 4	13.2%	11.5%
	More than 4	86.8%	88.5%
Poverty Status	Not poor	87.8%	90.9%
	Poor	12.2%	9.1%
Husband's Work Status	Doesn't Work	1.1%	2.3%
	Informal work	52.4%	52.4%
	Formal work	46.4%	45.3%

Source: Susenas, 2021 (Data Processed)

Based on Table 1, during the pandemic, most of the proportion of women with children under five in East Java who worked was dominated by women aged over 30 years, which was 61.1%. In terms of education, about 57% of women with children under five who participate in the world of work are dominated by those with education above high school, while the rest are women who have children under the age of 30 who work. There is an interesting phenomenon related to the work participation of women having children under five in urban and rural areas during the pandemic. In urban areas, it is known that the work participation of women having children under five is higher than in rural areas, which is 60.3%. For the category of internet use, it is known that the average number of women who have working children under five who use the internet in their daily lives is 80.9%. In the poverty category, the approach is household expenditure per capita compared to the poverty line of districts/cities in East Java. Women with children under five in East Java who work are dominated by those who fall into the category of non-poor households by 90.9%. For the employment status of husbands of women who have working with children under five, on average, husbands who work in the informal sector are 52.4%, then husbands who work in the formal sector are 45.3%.

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The results of the binary logistic regression analysis are explained through the odds ratio values shown in the following table.

Variable	Coef.	Odds Ratio
Age	0.519***	1.680
Education	0.461***	1.586
Residential Area Classification	0.105*	1.110
Internet Usage	0.206***	1.229
Number of Household Members	0.028	1.028
Poverty Status	-0.201**	0.817
Informal Husband's Employment Status	-0.809***	0.445
Formal Husband's Employment Status	-0.474***	0.509

Table 2. Binary Logistics Regression Results with C	Odds Ratio
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*** p<0.01, ** p<0.05, * p<0.1

From the estimation results using binary logistic regression analysis, it is known that the age variable has a significant positive effect on the work participation of women who have toddlers. Women over the age of 30 are more likely to participate in the labor market. The education variable has a significant positive effect on the work participation of women having children under five. The higher the education of women having children under five, the greater their participation in the world of work. Furthermore, the variable of residence area classification has a positive and significant influence on the work participation of women who have children under five. Women with toddlers who live in urban areas have a greater chance of working. For the variable of internet use, it is known that internet use has a significant positive effect on the work participation of women having children under five. In the variable number of household members, it is known that it does not have a significant effect on the work participation of women having children under five. This indicates that the number of household members does not significantly affect the work participation of women who have children under five. In the household poverty status variable, it is known that it has a significant negative effect on the work participation of women who have children under five. From this, it can be concluded that the work participation of women having children under five is greater for those in non-poor households during the Covid-9 pandemic. Furthermore, for the husband's employment status variable, it is known that it has a significant and negative effect on the work participation of women who have toddlers. Where husbands who do not work and husbands who work in the informal sector will increase the work participation of women who have toddlers.

DISCUSSION

Confirmed descriptive findings from logistic regression results. From the results it is known that the variables of age, education, area of residence, internet use, poverty status and husband's employment status have a significant relationship with the work participation of women who have toddlers. Meanwhile, the variable number of household members is not known to have a significant effect.

In the age variable for women who have toddlers, the chances of women having toddlers over 30 years old have a 1.68 times greater chance of participating in the labor market when compared to the chances of women having toddlers under 30 years old. The results of this study support research from Anne and Ramrattan (2012) which says that age is one of the factors that influence the supply of female labor and is a factor that influences women to enter the workforce.

In the model above, it is known that the opportunity for women who have toddlers to enter the labor market is influenced by education. The higher the education of women who have toddlers, the greater their chances of entering the job market. It is known that women who have children under five with education above high school have a 1.58 times greater chance when compared to women who have education below high school. This is supported by studies from Chaudhary and Verick (2014) and Ismail and Sulaiman (2014) which say that with increasing education and training facilities, it will increase a woman's opportunities to work, especially in developing countries.

On the variable of residence, urban and rural areas have different effects on the work participation of women who have children under five. The model shows that women who live in urban areas have a 1.1 times greater influence on the work participation of women who have children under five, compared to those who live in rural areas. This is contrary to previous research, namely research from Lusiyanti and Wicaksono (2020) which said that the work participation of women living in urban areas was lower than women living in rural areas. This happens because of the Covid-19 pandemic phenomenon which can have different impacts, where in urban areas there are more flexible jobs available for mothers with toddlers to work while caring for their toddlers. In addition, in urban any daycare facilities have been provided, so mothers can leave their children in day care while they are working.

In the variable of internet use, it is known that women with toddlers who use the internet have a 1.2 times greater tendency to enter the job market, than those who do not use the internet. In the era of the Covid 19 pandemic, the use of the internet has indeed made it easier for workers, especially women who have toddlers to work anywhere, including at home, without being bound by distance and time, while taking care of their children at home. This is in accordance with research conducted by Dettling (2017) which says that the use of high-speed Internet technology at home can have an effect on labor supply.

The variable number of household members is known to have an insignificant effect on the model. Where the number of household members affects the work participation of women who have toddlers by 1.02 times.

In the household poverty status variable, it is known that this variable has a significant negative effect on the work participation of women who have children under five. This means that women who have children under five who are in poor households have a tendency to be 0.85 times smaller than women who are in non-poor households. This phenomenon is very unique, especially during the Covid-19 pandemic, which has different results from previous research such as Maryati's research (2018) which says that the variable of household poverty status has a significant positive effect, where women in poor households are more have the opportunity to enter the job market. This happens because during the pandemic, with various restrictions on economic activity and the business sector, it will reduce women's access to have children under five to work, due to the reduction in existing business fields. In addition, the lack of capital owned by women who have toddlers who are in poor conditions, will make it difficult for them to open new business fields.

In the husband's employment status variable, it is known that during the Covid-19 pandemic when the husbands of women who have toddlers work both in the informal and formal sectors, their work participation will decrease compared to if their husbands do not work. It is known from the model that the work participation of women who have children under five is 0.4 times smaller if they have husbands who work in the informal

sector. In addition, the work participation of women who have toddlers is 0.5 times smaller than that of women whose husbands work in the formal sector.

CONCLUSION

Based on the results of the descriptive and inferential analysis that has been carried out, several important conclusions can be drawn, namely the work participation of women who have children under five in East Java during the Covid-19 pandemic was significantly positively influenced by the variables of age, education, area of residence, internet use, where factors These factors encourage an increase in women having children under five to work. In addition, the work participation of women with toddlers in East Java during the Covid 19 pandemic was significantly negatively affected by the variables of household poverty status and husband's employment status, where these factors led to a decrease in the work participation of women who have toddlers.

Women who have toddlers are complementary workers who support the family economy, especially helping their husbands to earn extra income. To support the increase in the work participation of women who have toddlers, it is necessary to have policies that make it easier for women who have toddlers to enter the labor market. Skills improvement needs to be done by conducting various kinds of training for female workers who have toddlers in increasing their capacity. In addition, policies that favor mothers with working children under five are also needed, such as policies on working time, sick leave, maternity leave, exclusive breastfeeding, etc.

In addition, in the era of the Covid-19 pandemic, with various restrictions and reductions in economic activities, policies are needed to maximize the potential for using the internet for women who have toddlers for work activities. Using the internet can increase the work participation of women who have toddlers, because work can be done anywhere, without disturbing their activities in parenting, where the digitalization policy will increase their productivity as an effort to restore the economy after the pandemic.

ACKNOWLEDGMENT

We would like to thank the Faculty of Economics and Business, Universitas Brawijaya who has helped our lecture process and to the supervisors who have given their time and knowledge for the smooth writing of this research.

DECLARATION OF CONFLICTING INTERESTS

In this study the author has no personal or special interest. This research is purely for academic purposes.

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