Research Paper

Factors Affecting Indonesian Women's Spending During the Covid-19 Pandemic

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Abstract.
Indonesia as a country that still holds a patriarchal culture, and the Covid-19 pandemic has negatively impacted women. The study aims to: 1) analyze women's spending conditions during the Covid-19 pandemic; and 2) analyze what factors affect women's spending during the Covid-19 pandemic. The results of this study can be used as material to formulate women's economic policies in the future. This study is a type of quantitative research using multiple regression analysis tools. Based on the results obtained: a) the average years of schooling has no significant effect on women's spending during the Covid-19 pandemic; b) the gender development index has a significant and positive effect on women's spending during the Covid-19 pandemic; and c) open unemployment has a significant effect on women's spending during the Covid-19 pandemic.

Keywords: Covid-19, women's spending, average length of school, gender development index, open unemployment

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1. Introduction

The conditions during the Covid-19 pandemic, which occurred during 2020 until now, of course have an impact on the welfare of the community. The Central Bureau of Statistics (2020) said that in Indonesia as a country that still holds a patriarchy culture, the Covid-19 pandemic has more negative impacts on women, such as: reproductive health risks, physical and mental health risks and economic risks. In addition to the household economic problems that occurred, other household social conflicts emerged. This problem can occur due to different views on the roles of men and women. Controversy on the role of women, both socially and economically, has been going on for a long time.

The role of women in Indonesia is often based on the norms, customs, beliefs or habits of the people who differ in each region in Indonesia. The limitation of this role makes women's space to move narrow, and often they only accept whatever decisions have been determined by society, without sufficient space to channel their talents and

expertise. This condition makes it even more difficult for women when they lose their place of dependence, especially if they do not have sufficient knowledge to just fulfill their daily needs. Women should be empowered socially and economically, so that they can meet their needs. Especially during the COVID-19 pandemic, forcing women to be more skilled in meeting their needs and the needs of their families.

Based on data from the Central Statistics Agency (2020a), in 2019-2020 the increase in the number of female part time workers was higher than that of men. This increase is thought to be due to an urgent need forcing women to work to fulfill their needs. In addition to entering part-time jobs, the Covid-19 pandemic has forced women into informal workers. The recession due to the Covid-19 pandemic has made the informal sector attractive because it is easier to enter, does not require special skills and benefits can be enjoyed immediately. There are 36.7 million women workers in the non-agricultural sector, 49.85% of them are informal workers.

The condition of these women illustrates that women still have limitations or differences to be able to play a role in work compared to men. Women who choose to work part-time may be due to their limited time to work. Indonesian women are burdened with more household responsibilities than men, so they do not have enough time to work full time, because they also have to take care of the household. While many women work in the informal sector, they have limited ability to work in the formal sector. More flexible time in the informal sector is an attractive offer for women, so they can work while taking care of their household. Becker (1993) describes how the model of family interaction with the "New Home Economists Theory" which states that if the family is an economic discussion, it can be modeled how elections and markets and families become the economy for women directly.

Furthermore, Feminist Economics develops which explains how gender as a central category explains a more integral and human understanding of the economy and the processes of inclusion and exclusion that occur in it in order to improve the functioning of the economic system so that all people can have access to a dignified life on the basis of equality (Agenjo). -Calderón & Galvez-Muñoz, 2019). Feminist economists have spent decades examining the unpaid work of women within the home, which is globally evident that nursing work during the pandemic is increasing and disproportionately burdening women (Bahn et.al, 2020 in Kabeer et al., 2021).

The amount of women's expenditure is a picture of women's standard of living. Women's standard of living describes how well the quality of women's lives is related to women's welfare. The Covid-19 pandemic has certainly had an impact on women's spending. The income received is reduced due to the decline in the economy or even no income due to the termination of employment (PHK) of the company. This change

in income, of course, has an impact on women's spending on goods and services purchased. The management of family expenditures in Indonesia is mostly done by women. Women must think harder, how to manage their finances properly, so that they are still able to meet their own needs or the needs of their families. So, with the Covid-19 pandemic, women are forced to be smarter in managing their finances, especially if they don't work and only depend on their husband's income as the head of the family. This study tries to explain how women's spending conditions are during the Covid-19 pandemic and analyze what factors influence it.

The Central Bureau of Statistics (2021c), states that "Consumption expenditure is carried out to maintain a standard of living, different income levels result in different levels of consumption". Education is the first variable that is thought to affect women's spending. Women with higher education are thought to be smarter in managing finances, thus affecting their spending. Wuryandari (2015) found that, a household that has a head of household who has a higher education, tends to be more prosperous and has greater expenditure than a head of household with a low education. Faridi (2015) found that in Pakistan the contribution of women, especially in the informal sector to help family incomes increase as the number of poverty increases, equipping women with higher skills and education is needed so that they can get better jobs and higher incomes to increase their contribution. they are in development. Unlike Wuryandari (2015) and Faridi (2015), Flagg et.al. (2014) found that in the USA education is less important in influencing gender role attitudes in food expenditure planning. Omar et. al. (2017) found that gender, age, education level had a significant impact on consumers' intention to buy organic food.

The gender development index (GDI) is the second variable that is thought to affect women's spending. The Central Bureau of Statistics (2020) stated that GDI is a measure that shows the magnitude of women's participation in economic life, politics and decision making, which can describe the condition of gender inequality. Faridi (2015) found that in Pakistan women have limited access compared to men. Flagg et al. (2014) stated that in the USA, there has been a shift in roles between women and men, namely the role of women as housekeepers has decreased and the participation rate of women's workers has increased, but on the contrary, the role of men taking care of the household has increased. Seguino (2010) found that gender equality in welfare (GEI), GDP, and GDP had a statistically significant effect only in the OLS regression.

Working or not, is the third variable that is thought to affect women's spending. Women who work will have different thoughts compared to those who do not work. Women who work have more ability to manage their spending than those who do not work. Manchanda (2012) found that working women were more likely to be compulsive

shoppers than women who did not work. Arshad et.al (2015) found that in Pakistan as a developing country there are significant differences between working and non-working women related to their positive welfare. Kabir et al. (2021) pointed out that the Covid-19 outbreak has strengthened the need for in-home care workers who have been assigned to women, not only because of school closures and disruptions in long-term care institutions, but also because many people have contracted the virus and need home care.

It is suspected that the average years of schooling, the Gender Development Index (GDI) and Open Unemployment have a significant effect on women's spending during the Covid-19 pandemic. This study aims to: 1) analyze the condition of women's spending during the Covid-19 pandemic, 2) analyze what factors influence women's spending during the Covid-19 pandemic. The results of this study can be used as material for formulating women's economic policies in the future.

2. Methodology

2.1. Type Study

Studies this use type study quantitative with approach correlational . Attempted explain the effect of average Years of schooling , Gender Development Index (GDI), and Open Unemployment on women's spending during the Covid-19 pandemic .

2.2. Variables and Operational Definitions

Studies this have two type the variables studied. First, variable dependent that is women's spending during the Covid-19 Pandemic. Second, variable independent namely: average Years of schooling, Gender Development Index, and Open Unemployment. Operational definitions are described in table 1.

2.3. Data Collection Techniques

The data used in the study this is secondary data sourced from the Indonesian Central Bureau of Statistics, related women's spending during the Covid-19 Pandemic , average Years of schooling , Gender Development Index (GDI), and Open Unemployment .

2.4. Research Design and Model

The equation of the regression model based on the drawing of the research model design presented in Figure 3 is as follows: $WS_t = \beta_0 + \beta_1 YS_t + \beta_2 GDI_t + \beta_3 OU_t + \varepsilon_t$ _

Description :

WS_t = Women's spending during the Covid-19 Pandemic

β_0 = Constant

$\beta_1, \beta_2, \beta_3$ = Parameter Coefficient

YS_t = average Years of Schooling

GDI_t = Gender Development Index

OU_t = Open Unemployment

ε_t = Error

2.5. Data Analysis Techniques

Data analysis used that is use Analysis Multiple Linear Regression for explain the effect of average Years of schooling (YS), Gender Development Index (GDI), and Open Unemployment (OU) on women's spending during the Covid-19 pandemic (WS). Test proposed hypothesis that is with perform simultaneous test (F test) and partial test (T test). Donations effect from variable independent to variable dependent, views with coefficient determination (R^2). In addition to the Goodness of Fit Test, the Assumption Test is also carried out Classic namely: Normality Test, Linearity Test, Multicollinearity Test and Heteroscedasticity Test.

3. Result and Discussion

3.1. Data Analysis

Goodness of Fit test results as described in Table 2, through t test, F test and coefficient Determination show that : a) the average years of schooling (YS) partially no take significant effect to women's spending during the Covid-19 Pandemic (WS) with the prob t-statistic value is 0.5879>α(0.10), b) Gender Development Index (GDI) partially take significant effect to women's spending during the Covid-19 Pandemic (WS) with the prob t-statistic value is 0.0000<α(0.10), c) Open Unemployment (OU) partially take significant effect to women's spending during the Covid-19 Pandemic (WS) with the prob t-statistic value is 0.0816<α(0.10), d) the average Years of schooling (YS), the Gender Development Index (GDI), and Open Unemployment (OU) simultaneously

take significant effect to women's spending during the Covid-19 Pandemic (WS) with F-statistic prob value is $0.000060 < \alpha(0.10)$, and e) Coefficient value determination of 0.661976, stating that ups and downs variation women's spending during the Covid-19 Pandemic (WS) is determined by average Years of schooling (YS), Gender Development Index (GDI), and Open Unemployment (OU).

Based on data analysis results, women's spending during the Covid-19 Pandemic (WS) Model, as follow:

WS = -23673.26 - 132,9320 YS + 360.7204 GDI + 0.003752 OU

The model shows that: a) Constant is -23673.26, means that if the average years of schooling (YS), the Gender Development Index (GDI), and Open Unemployment (OU) are 0, then women's spending during the Covid-19 Pandemic (WS) is Rp. -23,673.26 person/year, b) Coefficient 1 is -132,9320, becomes no means because based on hypothesis testing the average length of schooling (YS) is not take significant effect to women's spending during the Covid-19 Pandemic (WS), c) Coefficient 2 is 360,7204, means that if Gender Development Index (GDI) increases by 1%, then women's spending during the Covid-19 Pandemic (WS) increased of Rp. 360,720,4, d) Coefficient 3 is 0.003752, means that if Open Unemployment (OU) increases by 1 person, then women's spending during the Covid-19 Pandemic (WS) increased of Rp. 3,752.

Based on Assumption Classic Test results: 1) the residuals are normally distributed (Normality Test- Jarque Bera test), 2) the model is linear (Linearity Test- the Ramsey Reset Test), 3) There is no multicollinearity (Multicollinearity Test-Variance Inflation Factors test) and 4) There is no Heteroscedasticity (Heteroskedasticity test-White Heteroskedasticity test).

TABLE 1: Variables and Definitions Operational.

No.	Variable	Symbol	Definition Operational Variable	Data Source
1.	Women's Spending during the Covid-19 Pandemic	WS	Women's Spending during the Covid-19 pandemic are expenditure per capita Indonesian women in 2020.	Central Bureau of Statistics
2.	Average years of schooling	YS	total year used by woman residents in pass formal education in 2020	Central Bureau of Statistics
3.	Gender Development Index	GDI	The Index that showing the women could play in active in life economics and politics in 2020	Central Bureau of Statistics
4.	Open Unemployment	OU	Amount Indonesian women who don't have jobs and are looking for work, have no work and prepare business, don't have a job and don't look for work, because feel no possible get job and already have a job, but not yet start work in 2020.	Central Bureau of Statistics

TABLE 2: Goodness of Fit Test Results.

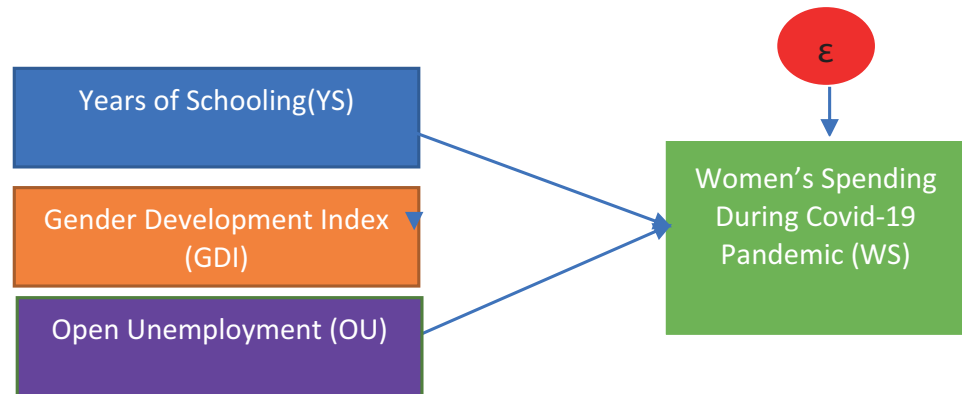| Variable Bound : WS		
Variable Free	t- Statistics	Prob.
C	-3.931479	0.0008
YS	-0.550703	0.5879
GDI	5.196622	0.0000
OU	1.834119	0.0816
R-squared	0.661976	
F-statistics	13.05582	
Prob(F-statistic)	0.000060	

Figure 1: Design of Research.

3.2. Discussion

3.2.1. Condition Women's Spending During the Covid-19 Pandemic

Based on Figure 2, women's spending during the Covid-19 Pandemic, the highest number was in DKI Jakarta Province is Rp. 16,742,000 per person per year and the lowest is in Papua Province is Rp. 3,999,000 per person per year. Many considerations on choice consumption during the pandemic. Three Thing the main being consideration consumption during the pandemic are: 1) *Head family's Work*. During the Covid-19 pandemic the government applied the big social scale restrictions policy. The Policy had impact on termination connection work on a lot company. If the head family had lost their income, then their wife will consider consumption, 2) *Health care needs*. During the Covid-19 pandemic, many people started think about they health care needs, like purchase food nutritious, vitamins, masks, hand sanitizers, etc., 3) Internet Network Needs. At the time government do the big social scale restrictions policy, then many activities conducted online, then of course just will increase internet network needs.
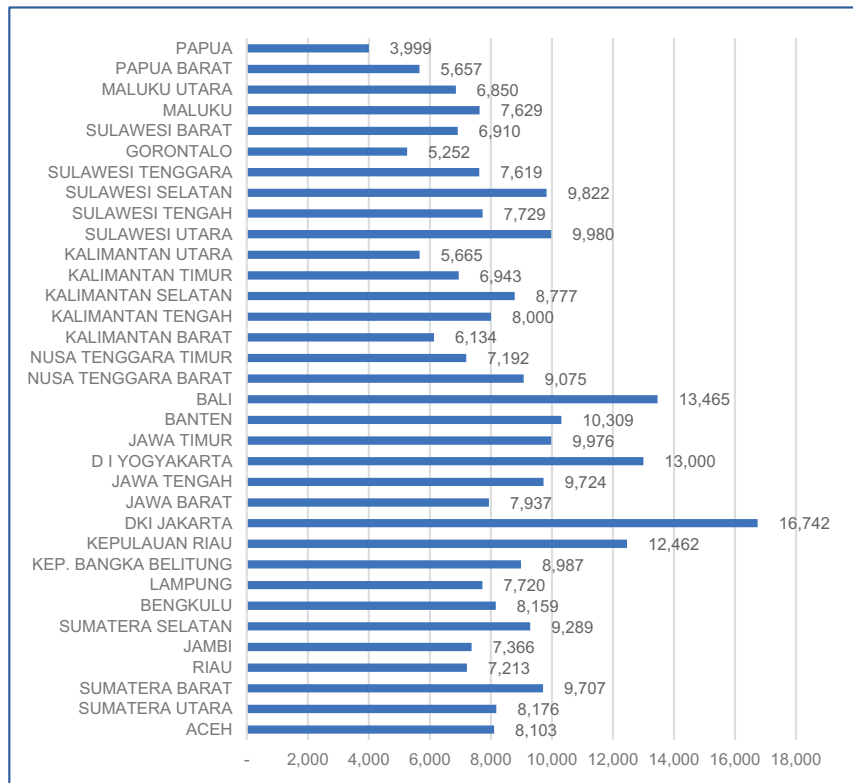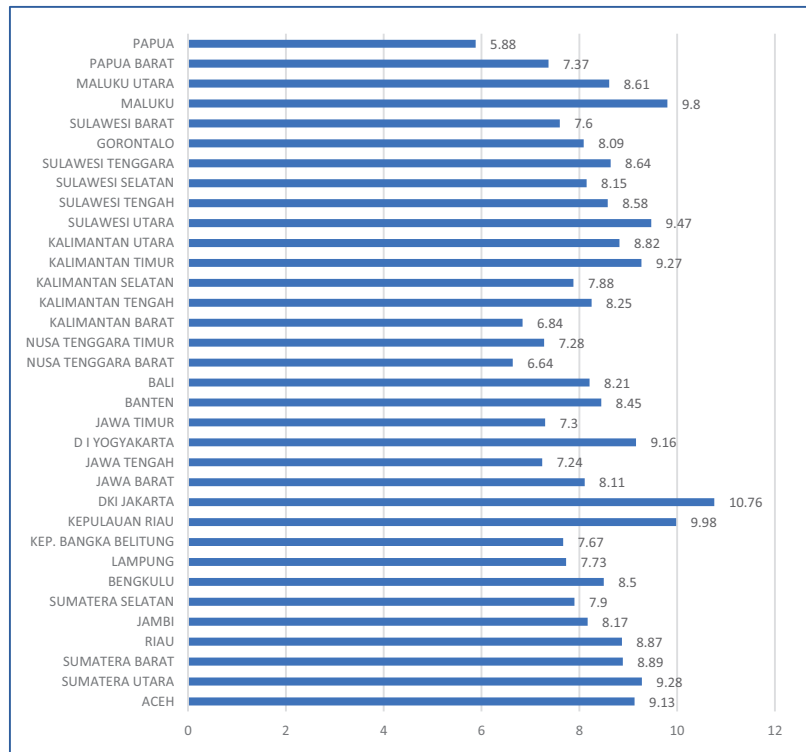
Source : Central Bureau of Statistics (2021d)

Figure 2: Expenditure Women per Capita Adjusted in Years _ 2020 (Thousand Rupiah / Person / Year).

### 3.2.2. The Effect of Average Years of Schooling to Women's Spending During the Covid-19 Pandemic

Based on Figure ??, the average Years of Shooling women in Indonesia in 2020 still not enough of 12 Years. This thing describes that, Indonesian women's resident still many have not finished their high school. This condition will influence Indonesian women thinking about their consumption. Average Years of Schooling no take significant effect to Women's Spending during the Covid-19 pandemic. The results, no support study conducted by Wuryandari (2015), Faridi (2015). However, support results the study of Flagg et.al. (2014) and Omar et. al. (2017).

Indonesian women are mostly no finished high school, in the end will impact on the immaturity in consideration of their consumption, because their knowledge are still not enough to choice their consumption. So, no amazed if the average years of schooling no take significant effect to Women's Spending during the Covid-19 pandemic. Ratnawati D. (2019) stated that "the main factor influencing appearance discrimination to right education includes norm or traditional rule that kills girl character, the shape of physical girl, economics speed, misinterpretation of religious teachings, and belief growing culture in life public countryside".
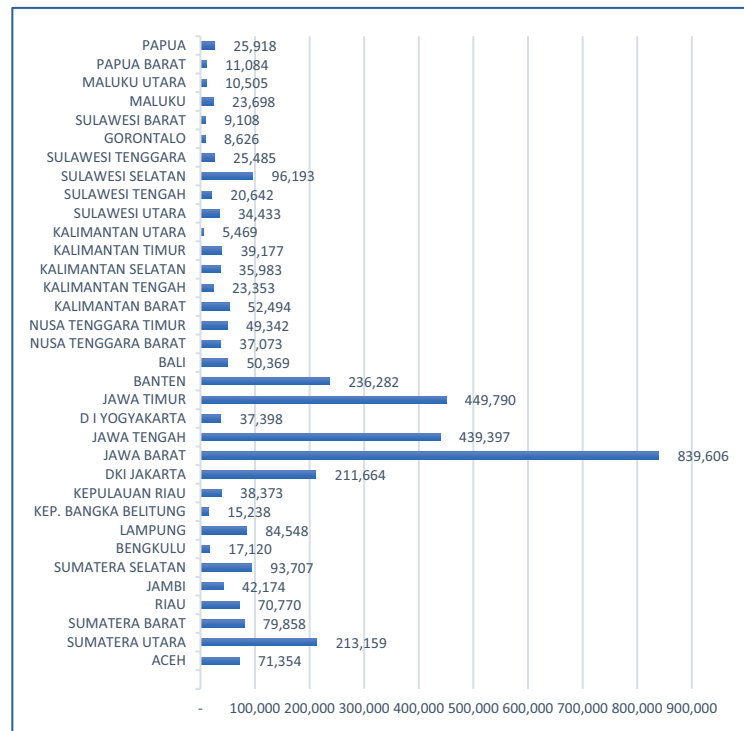
Source : Central Bureau of Statistics (2021e)

Figure 3: Average Length of Schooling for Women in Indonesia in 2020 (Years).
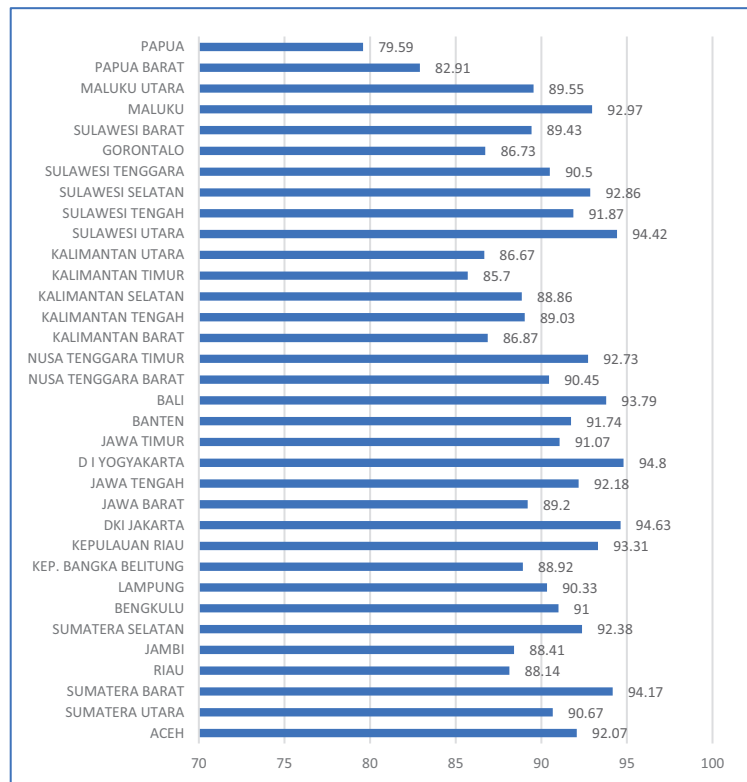
Source : Central Bureau of Statistics (2021a)

Figure 4: Gender Development Index in Indonesia in 2020 (percent).

Central Bureau of Statistics (2021b)

Figure 5: Female Open Unemployment in 2020 (persons).

Government has set policy must study 9 years. However, thereby need policy more from government for keep going motivate and encourage public will importance education in life society. Well men nor women, need have the same access to education. There are many people who still think that the women in the end only look after House stairs, so it's no urgent for women for go through more higeh education, eventhough education will affect someone thinking for a better life.

3.2.3. Influence Gender Development Index Against Women's Spending During the Covid-19 Pandemic

Based on Figure 4, the number The highest Gender Development Index in Indonesia in 2020 was in DKI Jakarta Province at 94.63, while the lowest was in Papua Province at 79.59. Like our know, more tall number Gender Development Index, describing that the more equivalent development among women with men. By common, mostly province in Indonesia had Gender Development Index above 85 in 2020. Only Papua and West Papua province had Gender Development Index below 85. This thing describes that the women development is noticed. It also describes participation woman in life economics, politics and making decision.

Gender Development Index has significant and positive effect to women's spending during the Covid-19 pandemic. The results support studies conducted Faridi (2015), Flagg et.al. (2014) and Seguino (2010). The positive effect from gender development index, means that if The Gender Development Index increases, so women's spending also increased. Based on data description, in general most provinces in Indonesia numbers The Gender Development Index in 2020 is above 85. This is of course just good for well-being Indonesian women.

The high of Gender Development Index, illustrates that participation woman in life economics, politics and making decision is also high. Including in thing decision women's spending during the Covid-19 pandemic. It is time for women to have a great opportunity to make choices in their lives. Government need carry out related programs with gender development, aims for increase index gender development. These programs designed for minimize discrimination Among men and women.

3.2.4. Influence Open Unemployment To Women's Spending During the Covid-19 Pandemic

Based on Figure 5, the largest number of unemployed women in Indonesia in 2020 was in DKI Jakarta Province with 839,606 people and the lowest was found in North Kalimantan Province of 5,469 people. The number of unemployed women was related with the Covid-19 pandemic, which resulted in many disconnections connection work by many companies. Unemployed will impact women on their ability by individual in fulfil her needs, then impact on their purchase decisions.

The number of open unemployed women took significant and positive effect to women's spending during the Covid-19 pandemic. The results support study conducted by Manchanda (2012), Arshad et.al (2015), and Kabir et.al. (2021). Meaning that the increase of unemployed women, make the more higher women's spending during the COVID-19 pandemic. The unemployed women think that they had no contribution in work, so they had no thinking about descision of their consumption. It was different with working women, they would more selected thinking in decision of their consumption.

The large number of unemployed women can not to be continue. The women is one of resource that if utilized will support the economy 's output. Women can contribute to increase growth economy. However, the problem is not only related to unwillingness women for work, but access of available jobs still limited for women. Not all type of profession accepted women as workers. Moreover, still many people thinking that the women as worker bother for company. A number of nature women who are considered troublesome for company, these include: menstrual period, pregnancy period, delivery

period, and breastfeeding period, considered will reduce productivity of their output and will impact on company performance and their profit.

Need the role of government for open the access of women for more easy work. The policies related worker woman need formulated by detailed related rights woman as workers, such as: leave giving birth, existence room breast pump, etc. Although anyway, women entitled get decent work and earn income, it can affect their well-being.

4. Conclusion, Limitations and Suggestions

Based on discussion explained that: a) the average years of schooling no take significant effect to women's spending during the Covid-19 Pandemic, b) the Gender Development Index has an significant and positive effect to women's spending during the Covid-19 Pandemic, and c) open unemployment take significant and positive effect to women's spending during the Covid-19 pandemic.

Required policy more from government for: a) continue motivate and encourage public will importance education in life society. Men nor Women, need have same access to education. b) implementing related programs with gender development, aims for increase gender development index. These programs designed for minimize discrimination among men and women. Also, c) open access woman for more easy work. The policies related working women need formulated by detailed related rights women as workers.

This study have limitations, i.e Women's Expenditures measured by macro, not looking the number of age and not be measured individually. Because of that, for next researcher can researching with same discussion, however with more detailed related Women's Spending with limitation age and measured individually.

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