Characteristics and Determinants of NEET Youth in Kalimantan Barat

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ABSTRACT

The change in population structure in Indonesia shows an increase in the young population. As an indicator to see youth's activeness in education and work, NEET has become one of the centers of attention for the government. The number of NEETs in West Kalimantan is in the top 10 provinces with the highest NEET in Indonesia and has increased over the past five years. It indicates that young people who do not work or attend school have not integrated into the labor market. This study investigates the characteristics and factors influencing NEET youth in West Kalimantan. The descriptive and inferential statistical method with a binary logistic regression model is the analytical approach taken in this study. This research use BPS data from the National Labor Force Survey (Sakernas) in August 2021, with a sample of 4,750 young people spread over 14 districts/cities of West Kalimantan Province. The study’s findings stated that most NEET youth in West Kalimantan were female, with the highest proportion of women aged 20-24. In addition, NEET youth in West Kalimantan were unmarried youth. Gender, age, completed education, marital status, education of the Head of the Household, and significant disability status are the determinants that determine whether a person is more at risk of becoming a NEET in West Kalimantan in 2021, according to the determinant findings of this study. Some of the recommendations from this study are the suitability of the educational curriculum with the availability of employment, equitable distribution of educational facilities, and information convenience.

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Keywords
Binary Logistic Regression
Socio-demographic
Uneducation
Youth Unemployment

Introduction

Indonesia is one of the most populous countries in the world. Over the past decade, Indonesia has experienced a demographic transition marked by a change in the population structure dominated by young people. It will then share the peak of the demographic bonus in 2030. We will be able to feel the benefits of the demographic dividend. The demographic dividend occurs as a result of the population structure, with the number of productive ages (15-64 years) being more significant than the proportion of the young population (15 years and under) and the balance of the elderly population (64 years and over). Theoretically, the demographic dividend could be a glimmer
of hope as the dependency ratio decreases due to decreasing infant mortality and decreasing fertility in the long term. We must prepare ourselves optimally so that this demographic bonus does not become a problem.

According to BPS (2022), West Kalimantan is one of Indonesia's provinces with the sixth largest population growth rate periods, 2010-2020. It also experienced changes in population structure. From 2010 to 2020, the proportion of the population in West Kalimantan who are productive age (15-64 years old) will continue to rise, as shown in Figure 1. In 2010 the abundant age population was 2.8 million people or 64.56 percent of the total population, and it expanded to 3.7 million people or 69.03 percent in 2020. In 2020, there appears to be a wider gap between the populations of productive age (0-14 years old and 65 years and older). It reflects that West Kalimantan is still in the demographic bonus period because more than half of the population is of productive age.

Source: BPS-Statistics of Kalimantan Barat Province (Population Census 2010 and 2020)

**Figure 1. The Population of West Kalimantan, 2010 and 2020**

The productive age population is expected to participate economically in their lives. The unemployment rate, which is a contradictory indicator of the active working age or formative age, can be represented by the Open Unemployment Rate. During the last three years, the Open Unemployment Rate in West Kalimantan has increased, from 4.45 percent in 2019 to 5.82 percent in 2021, which shows that the productive age workforce has not been in the existing jobs. In August 2021, there were 153,307 unemployed people in West Kalimantan. Of those, 51.53 percent were young people between the ages of 15 and 24 or those in school. (BPS, 2021).

Unemployment aged 15-24 years, generally still of school age, must be considered for further study. It is known as youth unemployment, which indicates the proportion of youth in the labor
force who do not have paid, available jobs and is actively looking for work (Statistics New Zealand, 2011). However, this Unemployment Rate cannot capture all the problems young people face because most of these young people are no longer in school and do not even appear in the labor market (UCW 2013). Youth long-term unemployment is a more serious problem because it can leave young people unable to learn how to work a job or make a living on their own (Adioetomo, Posselt, and Utomo 2014). There is a need for more in-depth information, hence the term NEET (not in education, employment, or training). The United Nations defines youth as individuals between the ages of 15 and 24 for statistical purposes. Then, in the eighth goal of the SDGs, there are indicators targeted at reducing the proportion of young people who are not working, uneducated, or trained.

NEET measures the number of young people outside the education system who are not working and are not attending training/training/courses, with an age range of young people aged 15-24 years (BPS, 2022). In other words, NEET indicates that youth who do not work or attend school are not yet absorbed in the labor market. The NEET rate in West Kalimantan in 2021 is 24.72 percent, including in the top 10 provinces with the highest NEET rates. If traced over the past five years, the NEET of West Kalimantan’s number tends to increase, whereas, in 2017, it was only 20.98 percent. The presence of NEET has the potential to have a more significant negative impact on themselves and the environment in which they are located, such as permanent dependence on their parents and a burden on the family economy, damaging the social structure, and hampering the country’s economy (Ministry of Manpower, 2021).

To the best of the author’s knowledge, researchers in Indonesia have done quite a several studies on the problem. These studies include at the national level by Pattinasarany (2019), Zoraya & Wulandari (2020), and Sari & Ahmad (2021). At the regional level, such as Aceh by Abrar et al. (2019), West Sumatra by Chintia Anggraini et al. (2020), West Java by Citra (2022), and West Sulawesi by Handayani & Yuliani (2022). However, little research concentrates on West Kalimantan Province as one of the contributors to the NEET number in Indonesia. Therefore, this research needs to be done.

This study investigates the characteristics and determinants of NEET youth in West Kalimantan. More than 50 percent of the unemployed in West Kalimantan are youth aged 15 to 24 years old (BPS, 2021). According to the BPS concept, the youth used in this study were 15 to 24 years, while the determinants of NEET were limited to socio-demographic characteristics. This study's findings are expected to serve as a reference for policymakers, particularly those working to develop young people's potential and empower them.

**Method**

The analytical method used in this research is a descriptive statistical method and statistical
inferential with a binary logistic regression model. This research data use BPS data, namely from the National Labor Force Survey (Sakernas) August 2021, with a sample of 4,750 young people spread over 14 districts/cities of West Kalimantan Province. By the NEET concept, the age range in this study is 15-24 years, which is the content of years used as an international standard for reporting on youth by the United Nations. Sakernas August applies the concept of NEET through the definition of Not in Education, namely those who have never attended school and are no longer in school at the level of formal or non-formal education (Package A/B/C). The definition of Not in Employment is not doing activities to earn at least one hour per week or not being entrepreneurial (self-employed, trying to be helped by irregular workers, and trying to be supported by permanent workers). It is also not a family worker/not paid, and not working/running a business for at least one week even though he has a job/business. The definition of Not in Training is those who, at the time of enumeration, were not attending training/courses/training (BPS, 2021).

**Table 1. Definition of Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Status</td>
<td>NEET</td>
<td>1 NEET</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 not NEET</td>
</tr>
<tr>
<td>Gender</td>
<td>gend</td>
<td>1 Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 Male</td>
</tr>
<tr>
<td>Area of residence</td>
<td>reg</td>
<td>1 Rural</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 Urban</td>
</tr>
<tr>
<td>Age Range</td>
<td>age</td>
<td>1 20-24 years old</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 15-19 years old</td>
</tr>
<tr>
<td>Education</td>
<td>educ</td>
<td>1 Middle school/equivalent and below</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 High school/equivalent and above</td>
</tr>
<tr>
<td>Marital status</td>
<td>marr</td>
<td>1 single</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 married/ever married</td>
</tr>
<tr>
<td>Number of household members</td>
<td>numHH</td>
<td>1 more than 2 people</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 less than 2 people</td>
</tr>
<tr>
<td>Head of household education</td>
<td>educHH</td>
<td>1 Middle school/equivalent and below</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 High school/equivalent and above</td>
</tr>
<tr>
<td>Disability status</td>
<td>disability</td>
<td>1 Disability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 non-disability</td>
</tr>
<tr>
<td>Risen Migration</td>
<td>mig</td>
<td>1 Risen migration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 not risen migration</td>
</tr>
</tbody>
</table>

Source: Sakernas

The analytical method used is binary logistics. Binary logistic regression analysis is a data analysis method used to find the relationship between the binary outcome variable Y and the
independent variable and to determine the tendency of each independent variable to the outcome/dependent variable (Hosmer et al., 2013). In this study, binary logistic regression results as the determinant factors that influence the NEET status of young people and the magnitude of the trend of variables that affect the NEET status of young people. Then, this model will be tested simultaneously and partially the suitability of the model. The following is a general equation for binary logistic regression:

\[ y = \ln \left( \frac{p}{1-p} \right) = \beta_0 + \sum_{i=1}^{9} \beta_i x_i \]  

(1)

Nachrowi and Usman (2002) stated that in the dichotomous logistic regression model, the logit function for \( Y=1 \) compared to the logit function for \( Y=0 \) expressed the dependent variable. In this study, the dependent variable was the youth categorized as NEET (\( Y=1 \)) and not NEET (\( Y=0 \)). The estimation method used is the Maximum Likelihood method. The independent variables used in this study (\( x_i \)) are sex, area of residence, age, latest education, marital status, number of household members, education of household head, disability status, and current migration status. \((p/(1-p))\) is the probability of youth to be NEET (\( Y=1 \)) for a particular \( x \), also known as the odds value.

**Results and Discussion**

**Characteristics of NEET in Kalimantan Barat**

Young people belonging to NEET in West Kalimantan Province amounted to 24.74 percent. It indicates that almost a quarter of the young population in West Kalimantan is not in employment, education, or training. This condition is quite unfortunate, considering that based on the population component, the number of young people in West Kalimantan is reasonably large. When viewed by district/municipality, the highest NEET was in Mempawah District (31.70%), followed by Bengkayang District (28.97 percent), Sanggau (27.30 percent), Kayoung Utara (27.19 percent) and Landak (26.94 percent). Meanwhile, Sintang Regency (18.87 percent) has the lowest NEET in West Kalimantan.

In general, the majority of NEET youth in West Kalimantan are female. The number of female NEET youth is almost double that of male NEET youth. Table 2 shows the existence of gender inequality occurs in West Kalimantan. In a gender inequality study released by BPS (2021), West Kalimantan's Gender Inequality Index in 2020 was below the National Gender Inequality Index, even as one of the provinces with the lowest achievement of gender equality in Indonesia, which is 0.498. Furthermore, when viewed from the average number of years of schooling, the average length of education for women is lower than for men, namely 6.93 years compared to 7.94 years. In terms of labor force participation, in 2021, men will be recorded at 83.05 percent, while women will be only around 53.43 percent. The difference in average wage level between men and women
in West Kalimantan is quite striking: Rp. 2,407,095.00 compared to Rp. 1,907,220 is suspected to be the cause of the low participation of the female workforce. The inequality of women's wages and the existence of gender discrimination in the surrounding environment tend to make women, after their school years, marry and take care of the household (Handayani and Yuliani 2022).

More than a third of young people in West Kalimantan who are not working, not attending school, or training are women, and the highest proportion is women aged 20-24 years (Table 2). Many women in this category may be because, traditionally, young women are involved in household management, care, or working as unpaid family workers who are not in the work category. Another reason is that young women, especially those aged 20-24 years, are of marriageable age. These women are already married and have children, so they do not enter the labor market. The number of NEET youth aged 20-24 years is possible because the higher the level of education, the rate of continuing school is getting smaller, and the dropout rate is getting higher.

Data from BPS-Statistics Indonesia shows that the rate of continuing schooling from a certain level of education to a higher level tends to decrease. A person with a low level of education who does not have specific skills tends to be more challenging to get a job. Regarding income levels, people with low education tend to come from families with low incomes. Low incomes make children stop going to school and look for work. However, they will also face significant workforce entry barriers due to limited cognitive abilities and skills. So they tend to despair and surrender.

Around 67.50 percent of NEET youth are in the age range of 20-24 years, and the remaining 32.50 percent are in the age range of 15-19 years. The number of NEET youth aged 20-24 years is possible because the higher the level of education, the rate of continuing school is getting smaller, and the dropout rate is getting higher. Data from BPS-Statistics Indonesia shows that the rate of continuing schooling from a certain level of education to one group of higher education tends to decrease. In West Kalimantan, in particular, in 2021, the SD/equivalent Education Completion Rate

![Figure 2. NEET by Regency/Municipality in Kalimantan Barat, 2021](image-url)
is 94.29 percent, SMP/equivalent is 79.65 percent, and SMA/equivalent is 54.27 percent. Handayani and Yuliani (2022) also found that there is more NEET youth in Indonesia in the 20-24 year age group than in the 15-19 year age group. Meanwhile, Citra (2022) found that NEET in West Java was more in the 20-24 age group compared to 15-19 years.

Table 2. NEET by Gender and Age Group in West Kalimantan, 2021

<table>
<thead>
<tr>
<th>NEET</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15-19 years old</td>
<td>20-24 years old</td>
</tr>
<tr>
<td>Number of NEET</td>
<td>39,840</td>
<td>93,503</td>
</tr>
<tr>
<td>percentage of NEET to total youth</td>
<td>4.62</td>
<td>10.83</td>
</tr>
</tbody>
</table>

Source: BPS West Kalimantan Province (data processed)

Based on the level of education, the highest proportion of NEETs is high school graduates or equivalent, which reaches around 106.59 thousand young people or 49.91 percent of all young people who graduate from senior high school education in West Kalimantan. This phenomenon is in line with the high unemployment from high school education level or its equivalent. This unabsorbed labor supply shows that this group of unemployed tends to prefer work or wait until the offer of jobs with wages exceeds the endowment point. This condition is also in line with the results of research by Sari et al. (2022) that most of the youth with NEET status have graduated from high school/equivalent. Furthermore, only about 4.72 percent of youth with NEET status in West Kalimantan have completed tertiary education. The small percentage of youth is in line with the opinion of Sukamdi (2014), which explains that education will increase a person's capacity and opportunity to diversify work and obtain capital.

Source: BPS West Kalimantan Province (data processed)

Figure 3. NEET by Educational Attainment in Kalimantan Barat, 2021 (thousand people)

In addition, NEET youth in West Kalimantan are primarily found in unmarried youth. A total of 55.46 percent of youth belonging to NEET are available. This finding is in line with Handayani and Yuliani's (2022) research, which states that the chances of young single men becoming NEETs are greater than those of married/never married, while the cases of young single women becoming NEETs are smaller than those of single men. On the other hand, it is stated that the chances of young single men becoming NEETs are greater than those of married/never married, while the cases of young single women becoming NEETs are more than single men. On the other hand, for
married/already married youth, the opportunities for women are more significant than for men, so the women spend more of their time on domestic activities, significantly when married, thus hampering their chances in the world of work. Traditionally, housework is still an activity that women usually do. The trend that has occurred so far is that women who have entered the labor market withdraw from the labor market for reasons of marriage and taking care of the household (Rofi & Sukamdi (2006). In contrast to the situation of NEET women, young men who are currently married/already married tend not to become NEETs. This condition can be made possible because men who are married/already married will actively try to get a job to support their families compared to men who are not married and do not have dependents.

**Determinant of NEET in Kalimantan Barat**

A simultaneous test of the model using the G test statistic resulted in an Omnibus Test of Model Coefficients value of 0.000, meaning that with a 95 percent confidence level, at least one independent variable significantly affects a person's status as a NEET. So that further analysis can be carried out. The Pseudo R-Square value in the research model is 0.167, meaning that the independent variables can explain a person's status as NEET by 16.7 percent, other factors outside the model influence the rest. The model obtained is as follows.

Using a logistic model with an error rate of type I (α-alpha) 5 percent, the prediction model has fulfilled the goodness of fit requirements and the simultaneous model test. The results obtained are gender, age, education completed, marital status, education of the Head of the Household, and significant disability status in determining whether a person is more at risk of becoming a NEET. However, area of residence, number of household members, and current migration status are not proven to determine a person's tendency to have NEET status significantly.

Table 3 shows binary logistic regression results in identifying the factors predisposing young people to NEETs. In the gender variable, the tendency of women to become NEET is 49 percent greater than that of men (Odd Ratio=1.498). It is because women generally do household chores, including caring for family members. This result is in line with Pattinasarany’s (2019) research, which found that housework is essential in keeping young women in NEET status. Furthermore, Citra (2022) found that the odds of women tending to be NEETs were 1.34 percent higher than men.

Descriptively, there is about 65 percent of NEETs found living in villages. Still, the results of the inference interpretation of the model show that the difference in residence between villages and cities does not provide a significant difference in variable “will”. It determines whether someone living in a village is more likely to become a NEET than someone living in a city or vice versa. It means that the extensive distribution of NEET in rural areas is more due to many regions in West Kalimantan with rural status, namely 1,825 regions. In contrast, the urban level is only 323 areas. This result differs from a European study by Eurofound (2012) in that the location of residence
significantly affects a person's chances or tendency to become a NEET. Eurofound concluded that someone who lives in a remote area is 1.5 times more likely to become a NEET than someone who lives in an urban area.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>Odds Ratio</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>gend</td>
<td>0.404</td>
<td>1.498</td>
<td>0.000</td>
</tr>
<tr>
<td>reg</td>
<td>0.125</td>
<td>1.133</td>
<td>0.126</td>
</tr>
<tr>
<td>age</td>
<td>0.374</td>
<td>1.453</td>
<td>0.000</td>
</tr>
<tr>
<td>educ</td>
<td>-0.667</td>
<td>0.513</td>
<td>0.000</td>
</tr>
<tr>
<td>marr</td>
<td>-1.502</td>
<td>0.223</td>
<td>0.000</td>
</tr>
<tr>
<td>numHH</td>
<td>0.237</td>
<td>1.268</td>
<td>0.243</td>
</tr>
<tr>
<td>educHH</td>
<td>-1.767</td>
<td>0.171</td>
<td>0.004</td>
</tr>
<tr>
<td>disability</td>
<td>3.023</td>
<td>20.545</td>
<td>0.000</td>
</tr>
<tr>
<td>mig</td>
<td>0.164</td>
<td>1.179</td>
<td>0.478</td>
</tr>
<tr>
<td>C</td>
<td>-0.291</td>
<td>0.748</td>
<td>0.254</td>
</tr>
</tbody>
</table>

Source: primary data processed

When viewed from the age group, the tendency of youth aged 20-24 years to become NEET is 45 percent greater than youth in the younger age group, namely 15-19 years (Odd Ratio=1.453). In other words, one’s chances of becoming a NEET increase with age. This trend is because most teenagers under 20 years old are still in school compared to the older population. This finding is in line with the results of a study by Yuniati and Amini (2020), which showed that older people are more likely to become NEETs than younger people.

A population aged 15-24 years unmarried has a higher risk of becoming a NEET, which is 0.223 times compared to those who are married/never married. This fact is in line with Anggraini et al. (2020), Susanli (2016), Zoraya & Wulandari (2020), who stated that marriage is a significant factor for someone to become a NEET. Married people, especially women, tend to be more easily involved in taking care of the household. Additionally, men tend to be more economically active than women because men are more responsible for the family later (Saputri and Setyodhono, 2019).

From the characteristics of the level of education completed, this variable significantly affects the condition of young people to become NEET. Compared with education above high school/equivalent, youth with junior high school education/equivalent or below tend to be less likely to be NEET (Odd Ratio=0.513). It is in line with the research of Yurttagüler et al. (2017). They found that the high tendency of young people to become NEET reflects the labor market structure, namely the mismatch between the skills prepared by universities and the characteristics of workers in companies. In addition, the high cost of education and intense competition to get into college can also cause high NEET in high school education/equivalent and above. Aina et al. (2021) found that investment in human capital is still the best way to eliminate the risk of marginalization.

Table 3 shows that the effect of the number of household members on NEET status is insignificant in this model. The difference between one household member only provides a 0.2
chance of becoming a NEET in West Kalimantan. However, Ranzani & Rosati (2013) found that youth who live in families with many members in Mexico tend to have a greater chance of becoming NEET. The presence of children under five will increase the chances of ART becoming NEETs. The argument is that the company of a toddler will make the ART look after and take care of the toddler so that he does not participate in the labor market or education. This finding is also in line with Maryati’s (2015) research, which states that not all college graduates can fit into the workforce, which results in an increase in the number of educated people without jobs.

The head of the household’s education level significantly affects the risk of young people becoming NEET. Young people whose household heads graduated from junior high school and below had a 17.1 times greater risk than youth with high school graduates and above. This finding confirms several previous studies, namely: Chintia Anggraini et al. (2020) and Byoung-Hoon & Jong-Sung (2012), which stated that the higher the parent’s education, the lower the education level of parents. Young people’s risk of falling into NEET status. Parents with higher levels of education tend to have broad knowledge and provide support so that their children also get a decent education and work.

Table 3 shows that youth with disability status are less likely to be in education, employment, or training (tend to be NEET). People with disabilities are 20 times more likely to become NEET than non-disabled people. It follows research findings (Wardah and Susiana 2019), which state that persons with disabilities still face barriers to employment and discrimination in various aspects of the workplace, such as limited job opportunities because only certain jobs/positions are available for persons with disabilities. Limited availability, a work environment that is difficult to access due to lack of supporting facilities, such as not all buildings having elevators, as well as negative attitudes and lack of confidence in the abilities of persons with disabilities. There is a need for government intervention, especially in education, to support and assistance for people with disabilities. In addition, the Vocational Training Center should accommodate and encourage the participation of people with disabilities. In the labor market, it is also necessary to have government support to expand opportunities for people with disabilities in the labor market.

Recent migration status also does not provide a significant difference from the results of the inferential analysis in this study. The migration status gives only 0.164 times tend to become NEET. In other words, a person with a migration status or not will not affect his connections in the region. This result differs from the results of Eurofound (2012), Zoraya & Wulandari (2020), and Naraswati & Jatmiko (2022). Eurofound found that the migrant rate increased the tendency to become NEET compared to non-migrant youth. Zoraya and Wulandari stated that youth with non-migrant status had a lower propensity to become NEET than migrant youth. Naraswati and Jatmiko discovered
that the likelihood of becoming an unemployed NEET is 1,459 times more significant for recent migrants than non-migrants.

**Conclusion**

Most NEET youth in West Kalimantan are female, with the highest proportion being women aged 20-24. Based on education level, the highest proportion of NEETs are high school graduates or equivalent. In addition, unmarried youth dominated NEET in West Kalimantan. The determinants that cause a person to have the opportunity to become a NEET in West Kalimantan in 2021 are gender, age, education completed, marital status, education of the Head of the Household, and significant disability status in determining whether a person is more at risk of becoming a NEET.

Looking at the general picture and determinants of NEET, we need several policies to reduce the percentage of NEET. The government needs to create an educational curriculum following the availability of the job market, especially at the SMA/equivalent level, including SMK. In addition, it is necessary to have an equal distribution of educational facilities so that access to information/education can be easily achieved by students, including in remote areas. Furthermore, the government should provide and facilitate access to training and skills development for young people, both non-disabled and disabled, to be able to advance their area of origin.

**References**


Characteristic and Determinant of NEET Youth... (Dara Septika Natalia Anggraeni)


