

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

The increase in the number of graduates is a result of the swift development in higher education. As the economy becomes digitized, there emerges a favorable shift in the industrial market with an increased demand for skilled workers. However, the rising graduate unemployment rate still remains a contentious topic. It is important to attend to the matters of graduate viability and employability which include issues such as job mismatch and unemployment especially given how much effort has been put in by the government or privately to ensure that these graduates are market ready. From the investment standpoint, this situation reflects a low or negative return for investment and a loss for the country as human capital is inefficiently allocated.

The mismatch between an individual's education and the prerequisites of a job is known as the job-education mismatch, and is a problem that needs to be addressed as it has dire consequences on the labor market (Veselinović et al., 2020). A job-education mismatch arises when the competencies of the employee do not meet the tasks in the job description (Li & Wang, 2020). It is common to confuse the term with other concepts that depict relative inefficiency in the use of manpower such as: overeducation, underemployment, overqualification, and underutilization (Robert, 2014). Nonetheless, the context of the study determines the appropriate use of the terminology.

Take the use of the term overqualification, it is frequently applied in graduate studies, and in research that focuses on higher education and economic growth. Psychological research, sociology, and organizational studies where attitudes towards work and performance are researched tend to use the term overqualification (Wang et al., 2019). In contrast, in employment and organizational contexts, the term underemployment is used more frequently with regard to a situation where (1) the employee is working for less hours than they are

contracted, or (2) the employee is overqualified for the position and is not fully utilizing their skills, training and experience (Beukes et al., 2017).

Mismatches can occur vertically or horizontally. Vertical mismatch is an inadequacy that occurs because the workforce has lower or higher qualifications or skills than required. Workforce with higher qualifications is called overeducation, while a workforce with lower qualifications is called undereducation. On the other hand, a horizontal mismatch refers to an insufficiency resulting from a significant difference in education or skill between the workforce's requirements and those of the job in the field of education (Safuan & Nazara, 2005). Technical abilities can be acquired more rapidly and effectively through structured training programs. In cases, involving a discrepancy between an individual's educational background and their current occupational role, the existence of a skills gap may be indicated (Allen & de Weert, 2007). The Mismatch of labor is an inefficient allocation of human resources because it can affect labor productivity. Three factors are closely related to the incidence of mismatch: the distribution of individual capabilities before entering university, the distribution of firms in adopting technology, and the cost of education (Ordine & Rose, 2017). As a result, there will be a lot of unemployment and the well-being of the people will decline. The dissatisfaction and wage effects experienced by the labor force may encourage them to seek others.

The level of education that workers have will be a signal for employers who are trying to find workers with the appropriate abilities. Mismatches occur in the world of work because the qualification demands of employers and the qualifications of workers do not match (ILO, 2018). The difficulty of the process of adjusting labor demand and supply causes a skill gap. In addition, an increase in the quality of labor offered is not followed by an increase in demand for labor that requires high skills, which can lead to a mismatch (Hasibuan & Handayani, 2021). It is important to appreciate that skills and credentials are not equivalent. The concept of skills represents a specific state of affairs at a given moment in time, which is typically a considerable period of time in the past. In contrast, the development and loss of skills is a continuous and ongoing process throughout an individual's lifetime (Senkrua, 2021).

A significant transformation occurred in the early 1990s, characterized by a shift in the composition of the workforce from the primary to the secondary sector. The expansion of educational opportunities is transforming the labor market. The elevated educational levels of the workforce are a consequence of increased access to education. However, the enhanced quality of the labour force through education has not been reflected in a corresponding distribution of labour according to the educational requirements of different occupations (Saputra & Junaidi, 2011).

Based on BPS (2023), the working-age population in West Sumatra Province, comprising individuals between the ages of 15 and 64, has reached a total of 3.24 million. The working-age population is primarily composed of individuals between the ages of 25 and 44, with a total exceeding 1.4 million. The Indonesian Central Bureau of Statistics (BPS) categorizes generations as generation x, comprising individuals born between 1965 and 1980, and millennials, comprising individuals born between 1981 and 1996.

The individual characteristics of generation x and millennials in the workplace are very different. The advancement of the millennial generation's education is not accompanied by the availability of jobs that match their qualifications being a problem for the moment. The millennial generation has a different work ethos than the previous generation, one of which prefers challenges in employment over job security, which is not achieved if the millennials work under their qualification. The education of the millennial generation is better than the previous generation. Compared to generation x, millennials and generation z have a greater desire to be leaders in their careers. Compared to generation x, generation millennials and generation z focus on matching their personalities to their working environment. Compared to matching personal characteristics with the workplace, generation x is more pragmatic in the world of work and focused on job stability. Intergenerational differences are an important factor in social categorization. The orientation, preferences, and work ethos of a generation are influenced by the cultural, political, social, and economic developments. Generation x and baby boomers still dominated labor market conditions between 2000 and 2016, although they had different characteristics and work ethos than the millennials. The millennial generation has a higher tendency to experience

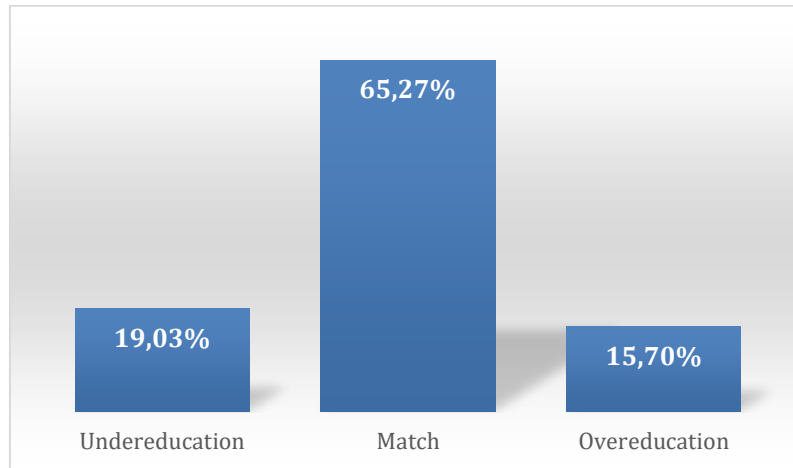
mismatched jobs than the generation x. The millennial generation has to compete with jobs with low education because of the fierce competition in positions that require the qualifications that fit them (Jamalludin, 2021).

According to SAKERNAS (2023), in 2 generations that exist in West Sumatra Province, namely generation x and millennials who are categorized as coming from the population age of 28-59. Workforce participation by age group is high among those aged 28 to 43, with consistently above 51.28% than 44 to 59 of the age group around 48,72%. This gives a signal that millennials have higher workforce participation than generation x. The data indicates that West Sumatera Province working populations are generally increasing, with the backbone of productive generations from millennials to generation x.

In West Sumatra Province in 2023, many workers with higher formal education cannot get jobs that match their qualifications, so many of them work in positions that do not require the skills or education they have. This causes a mismatch between the level of education and job qualifications in the workforce, especially in the 28-59 age group, namely generation x and millennials.

Data from the Central Statistics Agency and the Ministry of Manpower show that this mismatch is caused by a mismatch between the education curriculum and the needs of the local labor market. In addition, most job opportunities in West Sumatra Province are in sectors that do not require high academic qualifications, such as agriculture, wholesale and retail trade, the car and motorcycle repair and processing industry, so graduates with higher education tend to have difficulty working in match their education. On the contrary, there is an increasing tendency to work and an increasing number of active job seekers. On the other hand, several sectors are experiencing slow growth, while the informal sector is still the main choice for most workers, especially due to the lack of job opportunities in the formal sector.

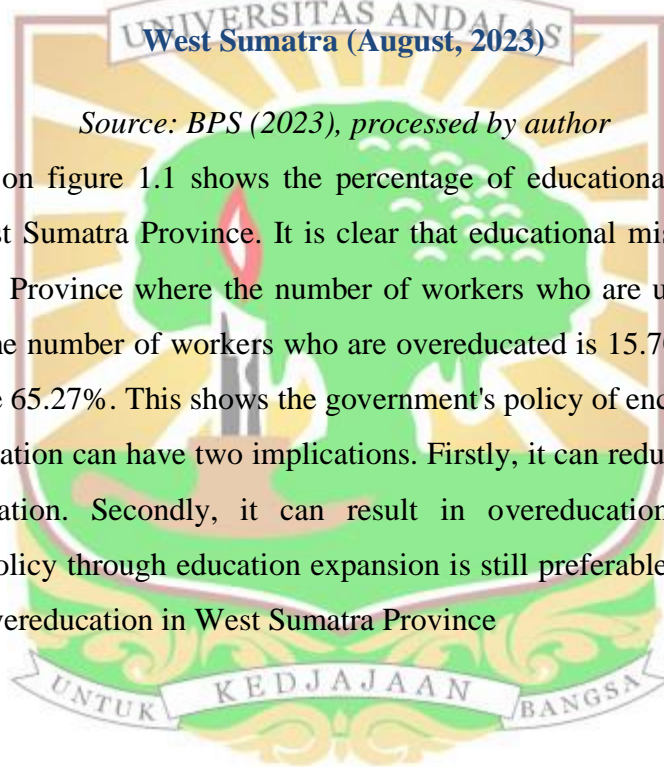
Audy Jolnaldy, deputy governor of West Sumatra Province, said that many diploma and undergraduate graduates from many universities in West Sumatra Province have difficulty getting a job amid the limited needs of workers in the West Sumatra industrial world. Working outside the region to abroad is considered very appropriate as a solution to reduce unemployment.

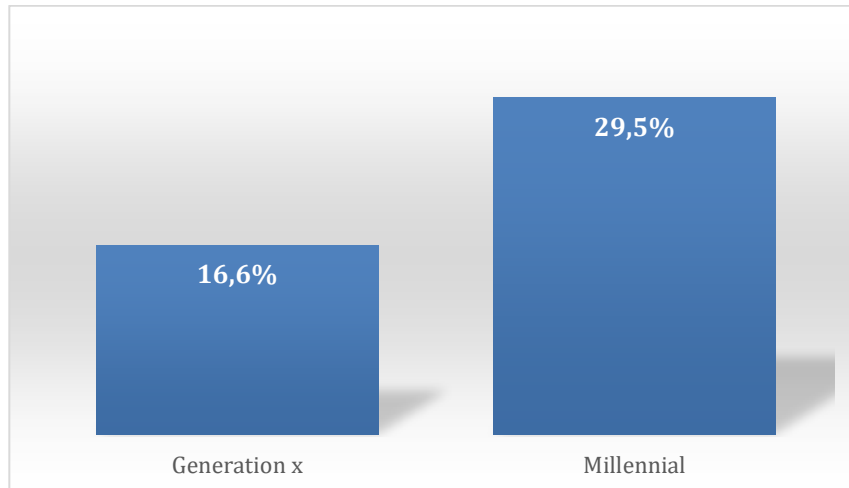


**Figure 1.1 Educational Mismatch Across Generation x and Millennial in West Sumatra (August, 2023)**

*Source: BPS (2023), processed by author*

Based on figure 1.1 shows the percentage of educational mismatch that occurs in West Sumatra Province. It is clear that educational mismatch exists in West Sumatra Province where the number of workers who are undereducated is 19.03% and the number of workers who are overeducated is 15.70% and workers who match are 65.27%. This shows the government's policy of encouraging access to higher education can have two implications. Firstly, it can reduce the incidence of undereducation. Secondly, it can result in overeducation. Despite this, government policy through education expansion is still preferable, even though it may lead to overeducation in West Sumatra Province

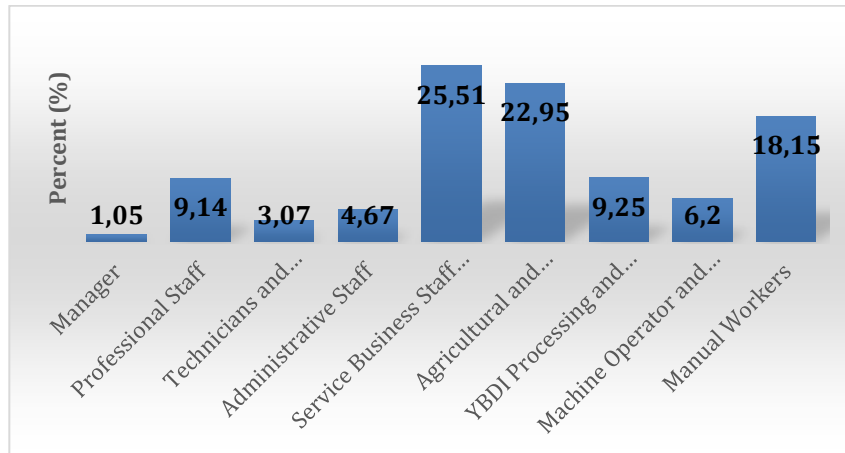




**Figure 1.2 Percentage of Population by generation in West Sumatra Province 2023**

*Source: BPS (2023), processed by author*

Figure 1.2 shows the percentage of the population of generation x and the millennial generation in West Sumatra Province. Among the two generations, the millennial generation occupies the highest position of around 29.5% or a total of 1,699.2 thousand people. After that, Generation x is around 16.6% or a total of 959.6 thousand people of productive working age in West Sumatra Province. This shows that in 2023, the millennial generation has dominated the labor market compared to generation x even though in terms of position on the job seen from the experience of generation x is more occupied than the millennial generation. The transition from traditional to knowledge-based economies has created new challenges for labor markets worldwide. In Indonesia, especially in West Sumatra, the demand for highly skilled workers has surged, driven by technological advancements and globalization. However, the extent to which the educational attainment of generation x and millennials aligns with the requirements of the contemporary labor market remains a subject of debate.

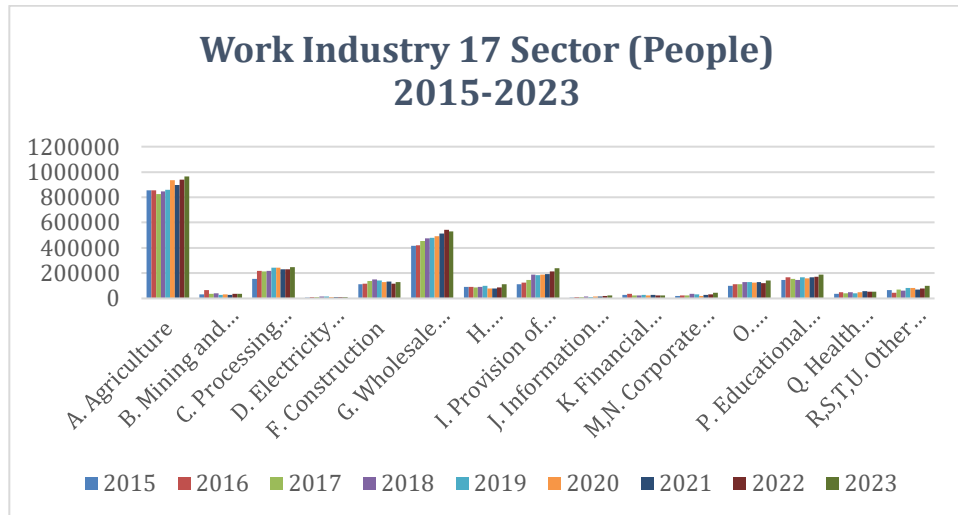


**Figure 1.3 Work position in West Sumatera (August, 2023)**

*Source: Sakernas (2023), processed by author.*

Nevertheless, a discrepancy exists between the highest level of education attained by the labor force and the educational qualifications required for certain work positions in the labor market. Based on figure 1.3 above, work positions are dominated by service business staff and sales staff at 25,51%, followed by agricultural and livestock business staff at 22,95% and manual workers at 18,15%.

Beside that, based on figure 1.4 below, shows the number of workers in 17 different industrial sectors in West Sumatera during the period 2015 to 2023. Agriculture is still the sector that contributes the largest number of workers from 2015-2023, in 2015 around 856.437 people and in 2023 around 964,493 people. This shows that the agricultural sector is still the backbone of the economy for some people in West Sumatera Province. The second largest sector is followed by wholesale and retail trade, car and motorcycle repair amounted in 2015 around 417.583 and in 2023 around 529,285 people. The third largest sector that absorbs labor is the processing industry which amounted in 2015 around 155.953 and 2455,68 people in 2023.



**Figure 1.4 Work industry 17 sector (people) 2015-2023**

*Source: BPS (2023), processed by author*

According to Hasibuan & Handayani (2021), people with higher levels of education have lower wages, whereas workers with lower levels of education have higher outcomes. This is consistent with other research conducted in other nations, which show that people who hold occupations that do not correspond to their educational background pay less than those who possess the same training and are employed in suitable positions.

According to Jamalludin (2021), generation is associated with the tendency of mismatch in the labor market. The old generation and the generation of fighters have a high tendency to experience mismatches in employment compared to the new order generation. The reform generation has a low tendency to experience mismatch in employment compared to the generation of the new order. The older the age, the less the difference in the proportion of mismatched workers between generations.

According to Patil and Patil (2019) in India, vertical job mismatches are more prevalent in industries, while horizontal mismatches are more common in academic institutions. This can be attributed to factors such as population growth and increased labor supply. Research suggests that the employability of Indian graduates has reached a new low, leading many to accept lower-level or unrelated jobs. Additionally, cultural diversity poses significant challenges for graduates seeking career opportunities in different regions, often hindering their willingness



to accept promotions or new positions. Consequently, many workers remain in their current jobs, regardless of whether they align with their educational qualifications.

Based on the above background, researchers are interested in examining what the influence the educational mismatch in generation x and millennials in West Sumatra with the existing labor market using independent variables that are generations, training, marriage status and work industry of research coverage as well as the dependent variable overeducation = 1, match = 0 or undereducation = 1 under the title "Educational Mismatch in Generation X and Millennial of West Sumatra Province".

### 1.2 Research Problem

The title of this research is “Educational Mismatch in Generation X and Millennial of West Sumatra Province“. This study aims to look at the causes of mismatch of education workers using variables, such as generation, training, marriage status and work industry on vertical mismatch in generation x and millennial in West Sumatera. Based on the background of the research that has been done above, this paper addresses some main research questions:

1. How does training influence educational mismatch in West Sumatra Province?
2. How does marriage status influence educational mismatch in West Sumatra Province?
3. How does generation x and generation millennial influence on educational mismatch in West Sumatra Province?
4. How does agriculture, wholesale and retail trade; car and motorcycle repair, processing industry and others sectors influence educational mismatch in West Sumatra Province?

### 1.3 Research Objective

This study “Educational Mismatch in Generation x and Millennial of West Sumatra Province”, which is rarely discussed. The analysis is carried out in order to:

1. To analyze the influence of training on educational mismatch in West Sumatra Province.

2. To analyze the influence of marriage status on educational mismatch in West Sumatra Province.
3. To analyze the influence of generation x and generation millennial on educational mismatch in West Sumatra Province.
4. To analyze the influence of agriculture, wholesale and retail trade; car and motorcycle repair, processing industry and others sectors on educational mismatch in West Sumatra Province.

#### **1.4 Research Advantages**

The results of this study will also be used by workers as a reference to prepare themselves in developing skills in entering the real world of work in dealing with educational mismatches and by the government in seeing the development of education and the job market in the following year in West Sumatra Province.

