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# Balancing Act: Underemployment Patterns and Age-Gender Diversity in Northern Mindanao

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# **ABSTRACT**

Underemployment continues to persist at a significantly higher rate than unemployment. Over half of the working population in Northern Mindanao falls into the category of visible underemployment, indicating that they work fewer hours than the standard work duration and are actively seeking additional work hours (Felipe & Estrada, 2018). This research aimed to comprehend the various forms of underemployment among Filipino workers in Northern Mindanao and assess the reasons for their underemployment status. A descriptive-correlational research design was employed in this study, which analyzed data from the July 2021 Labor Force Survey (LFS) involving 31,271 workers in the region to determine the relationship between underemployment of workers and their age and sex. The study's timeframe corresponded to the post-pandemic period, during which the region underwent economic reopening to establish resilience and facilitate the transition to recovery. The findings revealed that 74.90% of the respondents were visibly underemployed, while only 25.10% were classified as invisibly underemployed. Notably, the leading reason for underemployed workers working fewer than 40 hours was the variability in working time or the nature of their work (43.71%). Conversely, underemployed workers primarily sought more than 40 hours to increase their earnings (64.77%). Moreover, the findings revealed that age and sex have significant relationships to underemployment regardless of type, and workers of any age and sex experienced being underemployed.

Keywords – Underemployment, visibly underemployed, invisibly underemployed, age, Northern Mindanao

# INTRODUCTION

The landscape of work has undergone significant changes over the years. Numerous studies have highlighted that the conventional indicators of unemployment and employment are insufficient to comprehend the growing intricacies of the labor market (Kaur et al., 2020; LacmanovićS et al., 2016). The International Labor Organization (2016) and Pisica et al. (2015) discovered that unemployment statistics have consistently downplayed the magnitude of challenges faced within the labor market.

Underemployment is characterized by employed individuals still seeking additional working hours (Philippine Statistics Authority, 2022). It also encompasses individuals working in roles that do not align with their skill sets and qualifications (Asian Development Bank, 2021). Furthermore, underemployment is classified into two types: visibly and invisibly underemployed. Visibly underemployed pertains to individuals who are employed but worked for less than 40 hours and express a desire for additional work hours within the reference week. While invisibly underemployed pertains to employed individuals who have worked for 40 hours or more during the primary survey reference period yet still seek additional work hours within their current job, an additional job, or even aspire to secure new employment with extended working hours (Inventory of Statistics Standards in the Philippines – Philippine Statistics Authority, 2022).

Integrating individuals into the labor market with a focus on their skill development and education is crucial for establishing a prosperous, sustainable, and equitable socio-economic environment (International Labor Organization, 2016). The global economy is confronted with substantial risks due to the elevated levels of





underemployment and unemployment within organizational structures. This risk is further exacerbated by the increasing prevalence of non-standard work arrangements adopted by numerous employers (Berglund et al., 2017).

The emergence of COVID-19 has even exacerbated underemployment. The pandemic has disrupted the quality of work across Southeast Asia (Asian Development Bank, 2021) and in countries like Hong Kong, India, Australia, and Canada (Kaur et al., 2020). Recent labor force surveys conducted in the Philippines have validated the pandemic's detrimental impact on the country's labor market. These surveys reveal a significant decrease in hours worked, indicating a substantial rise in part-time employment and a decline in full-time positions (Khatiwada & Arao, 2020).

The labor market of the Philippines is marked by a noteworthy prevalence of underemployment rather than high unemployment, as noted by Felipe and Estrada (2018). The persistently high levels of underemployment, accounting for roughly 20% of total employment, are a significant concern. This result contrasts with the average % unemployment rate of 7% between 2010 and 2017. A significant portion of this underemployment, nearly 60%, is categorized as visible underemployment. This group comprises individuals within the workforce who notably work fewer than the standard 40-hour workweek and aspire to work more hours (Felipe & Estrada, 2018).

According to the recent press release from the Philippine Statistics Authority (PSA) in August 2022, the underemployment rate stood at 14.7%. This value translates to approximately 7.03 million workers who expressed their desire for extended work hours in their current jobs, sought additional employment, or aimed to secure a new job with longer work hours. Although this rate increased from 13.8% in July 2022, it remained consistent with the August 2021 rate of 14.7%. The significant number of underemployed workers, reaching 7.03 million, serves as a notable reminder for the Department of Labor and Employment (DOLE) that there is still substantial work to be done to enhance the job quality across the country (Vera & Pazzibugan, 2021).

According to researcher Jose Ramon G. Albert from the Philippine Institute for Development Studies (PIDS), the Philippines is projected to experience an excess of graduates with Information Technology (IT) backgrounds by 2025. However, the country needs a more significant number of students to pursue the science, technology, engineering, and mathematics (STEM) track, as there is a predicted shortage of skilled workers in these fields (Laforga, 2021). Similar concerns have also been raised for young individuals, as emphasized in the Global Employment Trends for Youth 2020 report. This report underscores the technological advancements associated with the fourth industrial revolution (4IR) that bring opportunities and challenges to young people in the job market. There are concerns about the potential for artificial intelligence and robots to replace their jobs. This concern is shared among developed and developing nations, who fear that such technological progress might not create new, well-paying jobs. If this situation persists, it could result in workers being compelled to accept low-paying and less productive jobs within the informal sector for their livelihood and survival.

Considering the repercussions of the COVID-19 pandemic that led to the loss of employment for millions of workers, the reshuffling of labor is a common phenomenon in the context of developing economies. With adequate social protection, displaced workers often need help to remain unemployed for extended periods and, therefore, tend to transition into less productive forms of employment. This scenario might involve shifts to agriculture or informal positions within low-productivity service sectors (Khatiwada & Arao, 2020).

Before the onset of the COVID-19 pandemic, the Philippines witnessed substantial economic and employment growth, with notable increases in wage and salary employment at an average rate of 4.6% annually from 2015 to 2019 (Conchada & Villasor, 2016, 2017; Philippine Statistics Authority (PSA), 2018, 2019, 2020). This rapid expansion in modern employment had a significant impact, attracting workers away

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from the informal sector and potentially providing employment benefits. However, the pandemic disrupted this trajectory, resulting in a loss of 1.7 million jobs between February 2020 and January 2021 (International Labor Organization, 2020).

In April 2020, Northern Mindanao experienced a 15-year high of 11.1% unemployment, attributed to the disruptive impact of the coronavirus pandemic on business operations. This outcome marked a significant increase from the unemployment rate of 5% recorded in April 2019, with the number of jobless individuals more than doubling within the region. This scenario equated to 236,000 unemployed individuals as of April 2020, surpassing 121,000 in April 2019 (Philippine Statistics Authority, 2020; Rappler, 2020).

In July 2021, Northern Mindanao stood among the regions experiencing significant employment declines, with a decrease of 10.4 percentage points, indicating 312,000 individuals classified as unemployed (National et al., 2021). Adding to this economic situation is the ongoing issue of rising prices for essential goods and basic commodities in the Philippines, coupled with the peso's depreciation against the dollar. This issue has adversely impacted living costs in certain cities like Manila (Yahoo! News, 2022), which has already affected many Filipino workers as early as 2021 (Rappler, 2021).

# **RESEARCH QUESTIONS**

The main objective of this study is to explore the various forms of underemployment encountered by workers in Northern Mindanao and how their age affects underemployment. Mainly, it aims to answer the following questions:

- 1. What type of underemployment (visibly underemployed and invisibly underemployed) do workers experience?
- 2. What are the reasons why workers work less than 40 hours a week?
- 3. What are the reasons why workers work more than 40 hours a week?
- 4. Was there a distinction between underemployed workers in Northern Mindanao regarding age and sex?

#### RESEARCH METHODOLOGY

In this study, a research design focused on a descriptive-correlational approach was employed. This approach aims to accurately depict the characteristics of the selected participants, including their age and the type of underemployment they experienced. This design was chosen to align with the study's objectives, primarily to ascertain visible and invisible underemployed individuals and understand how age and sex affect their unemployment.

The research utilized data from the Philippine Statistics Authority (PSA) from the July 2021 quarterly Labor Force Survey (LFS). Notably, this survey round included an extra component, the Family Income and Expenditure Survey (FIES), offering valuable insights into the relationship between the findings and poverty conditions. The FIES data captured the financial behaviors of households during the first half of the reference year. Specifically, the study focused on regional data from Northern Mindanao, which comprises its constituent provinces and incorporates Highly Urbanized Cities like Cagayan de Oro and Iligan.

# RESULTS AND DISCUSSION

This section provides an account of the outcomes derived from the secondary data employed in this study, drawn from the Labor Force Survey (LFS). It delves into the presentation and summary of this data to examine the two types of underemployment among workers in Northern Mindanao.

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Table 1. Frequency and Percentage Distributions of the Type of Underemployed Workers

Underemployed	Frequency	Percentage
Visibly Underemployed	5,781	74.9
Invisibly Underemployed		
Want More Hours of Work	915	11.86
Look for Additional Work	228	2.95
Want More Hours of Work and Look for Additional Work	794	10.29
Total	7,718	100.00

Table 1 shows the distribution of workers by type of underemployment. The results show that 74.90% of respondent workers are visibly underemployed. They work less than the regular weekly hours because they worked less than 40 hours the past week before the interview. This finding connotes that many underemployed workers were visible and felt such conditions and that most underemployed workers worked less than the regular 40-hour workweek.

Underemployment can also be experienced, though they have worked regularly during the past week. In such conditions as some people are affected by the drawback of high-priced commodities on the cost-of-living (Yahoo! News, 2022; Rappler, 2021), underemployment cannot be easily seen, thus, defined as invisibly underemployed. Table 1 also shows that there were a total of 1,937 workers in the sample respondents that were considered as such. In addition, invisibly underemployed individuals were defined as those working more than 40 hours a week but still desiring more hours of work or searching for additional work. Among these invisibly underemployed workers, 11.86% were categorized solely based on the criteria of wanting more hours of work, 10.29% met both the criteria of wanting more hours of work and searching for additional work, and 2.95% were characterized by the criterion of looking for additional work. This result indicates that most underemployed people are more inclined to seek longer working hours than pursue additional work.

Table 2. Frequency and Percentage Distributions of the Reasons of the Underemployed Workers for Working Less Than 40 Hours

Reasons for Working Less Than 40 Hours	Frequency	Percentage
Variable Working Time or Nature of Work	2,527	43.71
Poor Business Condition	491	8.49
Reduction in Clients/Work	142	2.46
Low or Off-season	335	5.79
Stormy Weather, Natural Disaster	95	1.64
Strike or Labor Dispute	16	0.28
Start/end/change of Job	48	0.83
Could Only Find Part Time Work	123	2.13
School/Training	339	5.86
Personal/Family Reasons	467	8.08
Health/Medical Limitations	353	6.11
Due to COVID-19 Pandemic Community Quarantine	504	8.72
Other Reasons	341	5.9
Total	5,781	100.00

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Table 2 shows the distribution of reasons for working less than 40 hours. Among the reasons, 43.71% signified that the fewer work hours vary to own work and is the nature of work (i.e., factory work, sideline teaching, driver in definite schedule, and other jobs with a contract of fixed hours or days a week only). Furthermore, 8.49% is due to poor business conditions, 8.72% is due to COVID-19 Pandemic Community Quarantine, and 8.08% were personal or family reasons (pregnant, taking care of children, or bedridden family member/s and the like). Other reasons are health and medical limitations at 6.11%, schooling/training at 5.86%, low or off-season at 5.79%, reduction in clients/work at 2.46%, could only find part-time work at 2.13%, lousy weather at 1.64%. Though tiny by 1%, it is worth noting that there are reasons like start/end/change of job (0.83%) and strike or labor dispute (0.28%) for this part.

As a result of the findings, more than 50% of the reasons for working less than 40 hours a week are due to business operation concerns of limited work hours duty. This situation is triggered by the corresponding reason for the COVID-19 pandemic, as one of the reasons for the collected data since 2021 is the postpandemic recovery period. The survey also falls during the region's transition to reopening businesses for economic resilience and recovery (Bird et al., 2021; National et al., 2021).

Table 3. Frequency and Percentage Distributions of the Reasons of the Underemployed Workers for **Working More Than 40 Hours** 

Reasons for Working More Than 40 Hours	Frequency	Percentage
Wanted More Earnings	2,274	64.77
Requirements of the Job	1,014	28.88
Exceptional Week	11	0.31
Ambition, Passion for Job	40	1.14
Other Reasons	172	4.9
Total	3,511	100.00

Table 3 presents the distribution of reasons for working more than 40 hours among workers, and the result shows that 64.77%, or more than half signify the reason for wanting more earnings. Moreover, the topmost reason is a job requirement, accounting for 28.88%. This finding shows that most workers with more than 40 hours a week still want more earnings than just what they are being paid for, which indicates the quality of work in Northern Mindanao.

Table 4. Frequency and Percentage Distributions of the Respondents According to Age

Age	Frequency	Percentage
15-19	4,619	14.77
20-29	6,827	21.83
30-39	5,695	18.21
40-49	4,951	15.83
50-59	4,308	13.78
60-69	3,016	9.64
70-79	1,346	4.3
80-89	450	1.44
90-99	59	0.20
Total	31,271	100.00

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Table 4 presents the distribution of the characteristics of the respondents in terms of age. There were 31,721 individuals in the July 2021 Labor Force Survey (LFS) data, and 55.87% of the respondents were from the age range of 20-29, comprising 21.83% of the total samples, 30-39 with 18.21% and 40-49 with 15.83% of the total samples. The data reveals that most working populations were mainly from these age ranges.

Table 5. Relationship between Age and Underemployment

Age	Visibly Underemployed	<b>Invisibly Underemployed</b>	Chi-square p-value
15-19	535	45	
20-29	1,023	381	
30-39	1,080	563	
40-49	1,099	498	
50-59	1,029	338	< 0.01
60-69	741	96	
70-79	231	15	
80-89	42	1	
90-99	1	0	
Total	5,781	1,937	

Among the age brackets (Table 5), visibly underemployed were observed to be more in aged 30 to 59, while invisibly underemployed were mostly found in workers aged 30 to 49. A chi-square test was also used to determine whether certain types of underemployment are statistically significant concerning age. If the pvalue exceeds 0.05, there is no statistically significant relationship between age and underemployment. Nonetheless, the chi-square p-value across all working ages is <0.01, which indicates high significance. The findings show that age is significantly related to underemployment regardless of type, and workers at any age experienced being underemployed.

Table 6. Frequency and Percentage Distributions of the Respondents According to Sex

Sex	Frequency	Percentage
Male	15,617	49.94
Female	15,654	50.06
Total	31,271	100.00

Table 6 presents the summary of the characteristics of the respondents in terms of sex, where there were almost 50% samples for both sexes. There were more female respondents, 50.06%, and 49.94% were male respondents. Statistically speaking, male and female workers are equal in numbers.

Table 7. Relationship between Sex and Underemployment

Sex	Visibly Underemployed	Invisibly Underemployed	Chi-square p-value
Male	3,284	1,341	
Female	2,497	596	< 0.01
Total	5,781	1,937	





Regarding sex (Table 7), underemployment is observed to be more common among males of both types. Males posted 56.81% who were visibly underemployed, and 69.23% were invisibly underemployed males. The chi-square p-value on both sexes is <0.01, which also indicates high significance.

# **CONCLUSION**

Based on the findings, the majority, accounting for 74.90% of the respondent workers in Northern Mindanao, fall into the category of visibly underemployed. This apparent trend indicates that they work fewer hours than the standard weekly norm, with their weekly working hours amounting to less than 40 hours leading up to the interview. This insight underscores that a substantial portion of the underemployed workforce experiences visible challenges, most of which fall short of the conventional 40-hour workweek. The primary cause for underemployed workers logging less than 40 hours stems from the nature of their occupation or employment. Conversely, the leading factor propelling underemployed individuals to work beyond 40 hours is their aspiration for increased earnings.

Moreover, it was also found that both the age and sex of the workers have significant relationships with their underemployment. Visibly underemployed were observed to be more in aged 30 to 59, while invisibly underemployed were mostly found in workers aged 30 to 49. In terms of sex variables, the majority of male workers are visibly and invisibly underemployed.

# RECOMMENDATIONS

The researchers suggest that the local government units in Northern Mindanao evaluate workers' rights concerning fair compensation, non-standard working hours, and the basis of payment. Additionally, it would be beneficial for them to examine the situation of married workers to design programs that can help alleviate the necessity of working excessively and allow for more family time. The researchers also propose that the Philippine Statistics Authority (PSA) revise their questionnaire design to include additional indicators that comprehensively uncover the reasons behind underemployment, considering factors relevant to the current economic circumstances. Furthermore, the Department of Social Welfare and Development (DSWD) is advised to extend assistance through social programs to areas facing severe cases and issues related to underemployment, mainly focusing on vulnerable individuals susceptible to such conditions. Lastly, policymakers are encouraged to explore and formulate policies and programs addressing the challenges of vulnerable workers susceptible to underemployment and other social issues like poverty. Establishing an inter-agency composed of various government bodies could help bridge gaps in underemployment, incorporating variables such as education, skills development, welfare dynamics, and worker protection.

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