ISSN No:-2456-2165

Exploring the Factors that Influence the Intentions of Filipino 4th Year Medical Technology Students to Work Abroad

Joanne Erica S. Guanzing¹, Kelda Bethany P. Lajara¹, Rachel Ann S. Manalo¹, Jelina Anne Celine M., Marcelo¹, Daryl Pocholo C. Marquez¹, Alexa Beatrice S. Martinez¹, Laarni E. Gloriani¹

"University of Santo Tomas, España Boulevard, Sampaloc, Manila

Abstract:- Industrialized countries opened the doors to highly skilled health professionals, especially Filipinos. This has now become an important feature of globalized labor market in healthcare. An estimated 2.2 million overseas Filipino workers were recorded based on a survey done in 2019 where 8.5% are working professionals including health professionals, such as nurses and medical technologists. The researchers aim to explore the factors that influence the intentions of Filipino 4th year Medical Technology students to work abroad. These factors can be classified into micro, mesoand macro-levels to better understand the hierarchy of these reasons influencing migration. The researchers employed a descriptive survey design for the study and followed a set inclusion and exclusion criteria for the screening of their participants. The surveys shall be distributed through Google Forms due to the restraints brought about by not being able to meet face-to-face with the participants. This method will ensure safety of the researchers and participants as they will only receive the survey through online means compared to the traditional on-site method. The researchers employed ANOVA in the statistical analysis of the data collection. The data gathered from the online survey resulted in 50% of participants having the intention to work abroad, 32% who do not have the intention, whereas 18% have not decided. This was further correlated with the factors that influenced them to work abroad, which included family influence, income, organizational setting, and political-economic situation views. The factors that were explored in relation to the intentions of the students to work abroad all yielded statistically insignificant results. This means that there is no one factor that stands out amongst the rest. This signifies that the student's motivation to migrate is prioritized by not only one specific factor, but all are equally important to them.

Keywords:- Healthcare Workers, Filipino, Medical Technologist, Work Abroad, Migration.

I. INTRODUCTION

Human migration is defined as the permanent change of residence by an individual or group which excludes movements such as nomadism, migrant labor, commuting, and tourism, which are all transitory in nature (Britannica, 2020) [45]. According to Castro-Palaganas (2017), healthcare

personnel migrate due to several reasons such as employment opportunities, educational purposes, to secure a better quality of life, and for economic and political reasons [10]. These reasons can be classified into micro-, meso-, and macro- levels to better understand the hierarchy of these reasons influencing emigration. Since the 1970s, the "culture of migration" has been introduced in the Philippines as a result of incurred foreign debts and high unemployment rates largely brought about by the Marcos regime. The Philippines' Migration Landscape (2017) also stated that the government has actively facilitated the concept of working and relocating abroad to deal with the high unemployment rate on one hand and to extend their support to overseas Filipino workers on the other hand.. As a result, millions of Filipinos were eager to relocate and work abroad to more developed countries (Maruja, 2019) [32]. In accordance with the Philippine Statistics Authority (PSA), it has been revealed that a notable 2.2 million estimated overseas Filipino workers were recorded in 2019, where 8.5% are working professionals including healthcare workers, such as nurses and medical technologists. Registered Medical Technologists (RMTs) have a broad scope of career opportunities making them in demand abroad. In the past decades, the Philippines has been a primary source of medical technologists for the United States and numerous other "source" nations (Dark Daily, 2010) [12]. This background paved the way for this research study that aims to explore the factors that influence the intentions of Filipino 4th year Medical Technology students to work abroad and create an in-depth analysis of the factors influencing this intention, and the preferred countries of destination.

II. METHODOLOGY

➤ Research Design

This study utilized a descriptive quantitative survey design. Participants were Medical Technology students of Batch 2021 who are expected to graduate in June of the same year. This discussed the factors that contribute to the intentions of the students in working abroad after graduating such as their family situation, income, organizational setting, socio-demographic, and political-economic situation.

➤ Participant Recruitment and Questionnaire

Participants of the study include 100 university students from four different universities in their fourth year that are currently undertaking Bachelor of Science in

Medical Technology in the Philippines. A non-probability purposive sampling design was implemented to accept individuals that match the inclusion criteria and can participate in the study. A 40-item questionnaire was developed by the researchers based on the mentioned research paper with permission from its respective authors ^[4]. The survey questionnaire consisted of two parts: the first being the student's socio-demographic characteristics relating to the student's age, sex, and socio-economic status. The second part tackled the student's intentions to work abroad and views on migration.

> Data Measure or Instrumentation

The researchers used a five-point Likert scale in assessing the participants' opinions and perceptions of their intentions in working abroad. A set of descriptive openended questions were also given to give the participants a way to express their opinions in the given question.

➤ Data Gathering Procedure

The data gathering procedure was conducted from February 2021 until March 2021. All study participants were contacted via Facebook messenger and/or email inviting them to participate in the study. The survey questionnaire was sent to all participants in the form of a Google Forms link and would take 15 minutes to be completed. Via Facebook Messenger, the survey was distributed by the researchers through their personal Facebook accounts.

> Statistical Analysis

The factors that influence the Filipino 4th year Medical Technology students to work abroad were analyzed using descriptive and inferential statistics. The identified factors micro-, meso-, and macro- that influence their intentions were correlated using Pearson r Moment of Correlation. As to the relationship between the demographic profile and the identified factors that influence the Medical Technology students to work abroad was determined using Kendall tau. These intentions identified in this research were supported by the result of the survey conducted by the researchers.

> Ethical Considerations

Before the survey questionnaire was released, the study was reviewed and approved by the Ethics Review Board. Once approved, a consent form was given to participants before surveys are disseminated.

III. DISCUSSION

In assessing the data gathered from 100 participants, fifty (50) have the intention to work abroad. On the other hand, thirty-two (32) participants do not have intentions to work abroad, while eighteen (18) have not decided if they intend to work abroad (see Table 6). From a general viewpoint, this shows that most of the participants do have intentions to work abroad. Additionally, when asked where their country of interest would be if they were to practice or continue studying abroad, the majority chose the United States (36%), followed by Canada (33%), and the United Kingdom (8%) (See Table 5). Some participants also chose other countries as their country of interest (23%). This can

be further supported by a study conducted by Castro-Palaganas (2017) wherein the top four preferred destination countries of the Filipino health professionals included were the USA, Canada, Australia, and the UK. Moreover, the Organization for Economic Cooperation and Development (OECD) which states that the United States is the most common destination country, receiving 36% of Filipino emigrants in 2015 [37].

IV. MICRO-LEVEL FACTORS

➤ Socio-Demographic Profile of Participants

Table 1. Socio-Demographic Profile of Participants

SOCIO- DEMOGRAPHICS	FREQUENCY		PERCENT (%)	MEAN
	19	3	3	
	20	16	16	
	21	42	42	24.20
Age	22	22	22	21.39
	23	12	12	
	24	5	5	
	Male	30	30	
Gender	Female	69	69	
	Prefer Not to Say	1	1	
	University 1	63	63	
University	University 1	16	16	
	University 3	15	15	
	University 4	6	6	
	Rural	11	11	
Location	Urban	89	69	
	Primary Education	3	3	
Father's	Secondary Education	10	10	
Educational Attainment	Tertiary Education	87	87	
	Did Not Attend School	0	0	
	Primary Education	2	2	
Mother's Educational Attainment	Secondary Education	5	5	
	Tertiary Education	93	93	
	Did Not Attend School	0	0	
Socio-Economic Status	Lower Class	1	1	
	Lower - Middle Class	29	29	
	Upper - Middle Class	70	70	
	Upper Class	0	0	

Labrague (2018) mentions that previous studies conducted using the cross-sectional and longitudinal designs have identified age as an important factor in explaining the turnover intention amongst nurses [27,28]. As seen in Table 1, the majority of the study's participants are aged 21 years old (42%). On the other hand, the youngest among the participants are aged 19 years old (3%) and the oldest being 24 years old (5%). This data agrees with the study conducted by the Organization for Economic Cooperation and Development (OECD) which states that young people between the ages of 15-24 are mostly interested in migrating abroad for work and/or other purposes such as their studies and to experience another culture [37].

Another part of the socio-demographic profile of the participants is gender. As stated by Bourgeault (2020), literature on health worker migration in the Philippines agreed that gender is a common determinant of migration [8]. As seen in Table 1, 69% of the study's participants were female and 30% were male. Bourgeault (2020) also mentioned that men are expected to remain at home to provide for children, while women take financial responsibilities and are thereby expected to travel to cater for the family from afar. Although not statistically significant, they mentioned that similar proportions of male and female students, both chose to work abroad. On the other hand, based on table 1, most of the students who took part in the study (63%) are from University 1 and the least from University 4 (6%).

Another socio-demographic profile gathered from the participants would be their location - whether they are part of a rural or urban community. As seen in Table 1, the results showed that most participants come from urban areas (89%), while others come from rural communities (11%). These results contrast with an article from the Bulletin of the World Health Organization (2014) which states that the location of a student's extended family does not correlate with international migration preferences. However, the article also states that students who have resided in rural areas are less likely to have the intention to work abroad [40].

Furthermore, the educational attainment of the participants' father and mother were also demonstrated in the data gathered. Majority of the participants' parents have attained tertiary education (87% for fathers and 93% for mothers, respectively). As such, the data gathered is incongruent with the study conducted by Noden (2015) as well as by OECD (2017) which states that there are more students with parents that have attained a secondary or tertiary education who desire to work abroad as compared to those with parents who have attained primary or unknown education [36, 37]. Based on Gorodzeisky (2014), Filipino global migrant workers have a higher degree of formal education compared to their fellow countrymen who remain and work in the domestic labor market [20].

Lastly, the socio-economic status seen in Table 1 displayed that most participants belonged to the upper-middle class with a percentage of 70%. Wong (2014) mentioned that social status influences students' views of job opportunities and perceived career prospect ^[49]. On the other hand, Limpangog (2013) argued that migration offered a pathway to a more liberating quality of life, allowing them to either restore their diminishing middle-class status in the Philippines or experiment with a new way of life in the new environment ^[20].

➤ Assessment of Education

Table 2. Assessment of Education

EDUCATION	FREQUENCY		PERCENT (%)	MEAN	INTERPRETATION		
Describe experience of studying medical technology	Poor	1	1				
	Indifferent	3	3				
	Good	27	27	3.77	Very Good		
	Very Good	56	56				
	Excellent	13	13				
	Poor	4	4				
Quality of	Indifferent	0	0				
classroom teaching/instructi	Good	28	28	3.81	Very Good		
on	Very Good	51	51				
	Excellent	17	17				
	Poor	3	3	4.01			
Quality of	Indifferent	0	0				
academic	Good	20	20		Very Good		
training facilities	Very Good	50	50				
	Excellent	27	27				
	Poor	1	1		Very Good		
Quality of	Indifferent	13	13				
support from	Good	32	32	3.56			
faculty staff	Very Good	37	37				
	Excellent	17	17				
Relevance of the Medical Technology curriculum to present-day health challenges that face the Philippines	Poor	1	1		Excellent		
	Indifferent	0	0				
	Good	10	10	4.52			
	Very Good	24	24				
	Excellent	65	65				

When the participants were asked about their experiences with the education that they are receiving, the majority rated their educational institutions as particularly good to excellent. This is in line with the participant's intent to work abroad as better education can also lead students to work for better institutions. Furthermore, participants answered a few open-ended questions in the latter part of the survey. Among those questions was one that asked what can be done to improve the reputation of healthcare workers, and an emphasis on education and awareness was pointed out.

"I think we need to educate the public about the importance of healthcare workers especially now that we are in a pandemic." - (21-year-old, female student)

As mentioned in the testimony of a participant, it was assessed that better education and awareness should be emphasized to improve the recognition being received by healthcare workers. In relation, Castelli (2018) states that people who receive better educational instruction have more pronounced initiatives, attitudes and boldness with skills and financial resources for international migration as compared to their peers that are left in their origin country [9]. Statistical interpretation of data in Table 2 shows that dictates that the participants are very satisfied with their education. However, in terms of the quality of support they receive from the faculty staff, it is shown to be borderline "very good." Nonetheless, even from a statistical standpoint, this can be seen as good - having an increase in dissatisfaction means that even with good quality of education, some are unable to approach their faculty staff when important decisions are needed. This is in congruence with a study by Awire (2020) which mentions that students feel scared to approach their professors as there is a hierarchy in medical school which leads them to perceive the support, they receive from their respective institutions in a less positive way [4].

> Family Context

Table 3. Migration History

MIGRATION HISTORY	FREQUENCY			
Have you ever been abroad (outside	Yes	82		
Philippines)?	No	18		
Do you have a family member,	Yes	82		
friend, or colleague who is a medical technologist/healthcare worker?	No	18		
	Yes	67		
Have they practiced abroad?	No	13		
	N/A	20		
	None	2		
	Neighbor I know/heard of	7		
What is/was your relationship with this person?	Friend/ colleague	53		
this person.	Extended family member	60		
	Nuclear family member	32		
Is this person/s was influential in	Yes	26		
your decision to study medical	No	50		
technology?	N/A	24		

The results for family context were derived from the "Migration History" section of the survey. According to the study of Castro-Palaganas (2017), the perceptions and evaluations of the source country's situation relative to the personal and family context of their participants influenced decisions to migrate. Although some participants indicated that they could survive in the Philippines as a single individual, they stated that supporting a family was extremely difficult. As a result, many parents encourage their children to study nursing and work abroad to earn a higher salary and support their families through remittances [10]. It is said that households with family members that are employed in the global market have an income per capita twice of those without. It is expected that these labor migrants send portions of their earnings to their families back home as a strategy for economic survival. In 2017, The Levin Institute conveys that most of the total accumulated remittances originated from Filipino healthcare workers, who are perceived to be the largest service sector working group of Filipino emigrants. These are used to provide for daily necessities, to raise the standard of living, and eventually improve the quality of life of these families on a micro-economic level, used to relieve financial constraints in the household as well as in repaying loans of the family, eventually helping the family make long-term investments to uplift their situations (Gorodzeisky, 2014) [20].

Participants of the study were asked if they had been abroad or outside of the Philippines and if they had any relatives, friends, and/or colleagues who work in the healthcare industry. Majority of the participants had answered in affirmative and indicated that these people have practiced abroad. In relation to this, participants were also asked what their relationship with these individuals were and if they were influential in their decision to study Medical Technology. Most participants mentioned that these people were extended family members and that they were not influential to them in making their decision to study the program. Only a few participants agreed that these relatives, friends, and/or colleagues were indeed influential to them. However, these participants were then further asked how these people were influential to them, some had this to say:

"My ninang works as the "head" medical technologist in their lab in Vancouver, Canada and she earns quite a sum, she managed to bring her family with her, and they were privileged enough to grow up immersed in another culture, another country. They own their own house there now and it is absolutely beautiful" - (20-year-old male student)

Responses to this question were varied as some were intrigued by the benefits received by their relatives, while others respected their family and grew interested in the field of medical technology. As exemplified by the first testimonial, Marcus (2014) states that family migration, in which the whole family migrates to the new destination country with the Filipino nurse, was deemed necessary for nurses wishing to leave the Philippines, demonstrating the country's strong family culture [31]. Despite these testimonials by those who agreed that these family members were influential to them, the participants' motivation to study Medical Technology was not because of financial instability and the desire to support or uplift their family through sending remittances, but due to family suggestion on the ideal program for their child.

V. MESO-LEVEL FACTORS

> Organizational Settings

Table 4. Views on Migration

VIEWS ON MIGRATION	FREQUENCY		PERCENT (%)	MEAN	INTERPRETATION	
	Strongly Disagree	0	0			
There are better prospects for my career development as a Medical Technologist abroad	Disagree	2	2		Strongly Agree	
	Neutral	8	8	4.49		
	Agree	29	29			
	Strongly Agree	61	61			
I will be able to find the job that I want abroad	Strongly Disagree	2	2			
	Disagree	3	3			
	Neutral	22	22	4.03	Agree	
	Agree	36	36			
	Strongly Agree	37	37			
	Strongly Disagree	0	0			
I will experience better job	Disagree	1	1			
satisfaction practicing abroad compared to practicing in the	Neutral	13	13	4.34	Strongly Agree	
Philippines	Agree	37	37			
	Strongly Agree	49	49			
	Strongly Disagree	2	2			
My family will be financially	Disagree	2	2		Strongly Agree	
better-off with me practicing	Neutral	9	9	4.48		
abroad	Agree	20	20			
	Strongly Agree	67	67			
	Strongly Disagree	2	2			
It is important to have the	Disagree	2	2		Agree	
experience of practicing abroad	Neutral	19	19	4.17		
at some point in your career.	Agree	31	31			
	Strongly Agree	46	46			
	Strongly Disagree	2	2			
My overall standing in my	Disagree	6	6			
community will be improved if I practice abroad as compared	Neutral	26	26	3.94	Agree	
to practicing in the Philippines	Agree	28	28			
	Strongly Agree	38	38			
Medical technologists get better recognition in the Philippines if they have practiced overseas before	Strongly Disagree	3	3		Agree	
	Disagree	4	4			
	Neutral	22	22	4.01		
	Agree	31	31			
	Strongly Agree	40	40			

ASPIRATIONS TO MIGRATE	FREQUENCY		PERCENT (%)	MEAN	INTERPRETATION
	Strongly Disagree 2 Disagree 3		2		
			3		
I have given some consideration to the idea of going abroad to practice someday	Neutral	11	11	4.35	Strongly Agree
going across to practice somethy	Agree	26	26		
	Strongly Agree	58	58		
	Strongly Disagree	5	5		
	Disagree	10	10		Agree
I have inquired about information regarding going abroad to practice	Neutral	21	21	3.83	
going and the practice	Agree	25	25		
	Strongly Agree	39	39		
	Strongly Disagree	8	8		
	Disagree	20	20		
I have most of the information I need about how to qualify to practice abroad	Neutral	33	33	3.2	Neutral
	Agree	22	22		
	Strongly Agree	17	17		
	Strongly Disagree	7	7		Agree
	Disagree	10	10		
I would like to move abroad to practice comeday after graduation	Neutral	26	26	3.62	
Tomous, and Eraduation	Agree	28	28		
	Strongly Agree	29	29		
	Strongly Disagree	12	12		Neutral
	Disagree	20	20		
There is a plan in place for me to migrate abroad to practice after graduation	Neutral	29	29	3.2	
abroad to practice area Eradadoa	Agree	14	14		
	Strongly Agree	25	25		
	Strongly Disagree	4	4		
I am not concerned that despite qualifying as a	Disagree	8	8		
medical technologist in the Philippines, I will still be required to pass qualifying	Neutral	25	25	3.81	Agree
examinations before I can practice abroad	Agree	29	29		
	Strongly Agree	34	34		
	Strongly Disagree	2	2		Agree
I sm not discouraged by the length of time it	Disagree	11	11		
ould take to acquire the necessary certification	Neutral	24	24	3.86	
to practice abroad	Agree	25	25		
	Strongly Agree	38	38		
	Strongly Disagree	1	1		
The resources it would take for me to past the qualifying examt to practice abroad does not discourage me	Disagree	5	5		Agree
	Neutral	26	26	4	
	Agree	29	29		
	Strongly Agree	39	39		
	United States	36	36		
If you were to practice or continue to atudy	United Kingdom	8	8		
abroad, where would your country of interest be?	Canada	33	33		
	Others	23	23		

Table 5. Aspirations to Migrate

The results for organizational settings were derived from the "Views on Migration" section of the survey. In a study conducted by Castro-Palaganas (2017), meso-level phenomena include organizational settings that encompasses workload, working conditions, and career opportunities relative to different health professions, in destination and source countries. When the participants were assessed if there are better prospects for their career development as a Medical Technologist abroad, the majority answered "strongly agree" which is reflected in the mean of 4.49. Majority of the participants (49%) vielded a result of "strongly agree" when asked if they will experience a better job satisfaction practicing abroad compared to practicing in the Philippines. On question 23, the participants "strongly agree" twice that their family will be better off with them practicing abroad which reflects a mean of 4.48. Next, most of the participants "agree" that it is important to have experience of practicing abroad at some point in their career. In addition, most of the participants answered "agree" seen in the mean of 4.03 as a response to question 21, which asks if they will be able to find a job, they want abroad in connection to this, most of them also "agree" that their overall standing in the community will be improved if they practice abroad as compared to practicing in the Philippines. Lastly, a mean of 4.01 which shows most participants answered "agree" when they were asked if medical technologists get better recognition in the Philippines if they have practiced overseas before.

According to Arthur (2019), every Filipino's motivation and inspiration is their career growth. This includes working abroad to fulfill their dreams and to apply their educational attainment in a practical setting. According to Arthur (2019), the ideal foreign countries in migration for nurses would be Canada, New Zealand, United Kingdom, United States of America, and other developed, industrialized, and English-speaking countries who need a growing labor force in their healthcare systems [2]. It has been reported that more than 1000 Filipino medical technologists are registered by the Philippine Regulatory Commission (PRC) each year and the ASCP has certified more than 2000 Filipino medical technologists alone in 2013, although not specifying the percentage of entry-level professionals included [6]. In the same study, the US Coordinating Council on Clinical Laboratory Workforce has reported the demand for 150,000 new medical technologists in 2014 and that 40% of medical technologists were due for retirement in the next decade. The global demand for health workers coupled with the potential growth in social and professional status inclines health professionals to migrate and work abroad [8]. These points relate to the results gathered wherein most participants agree that they will be able to find a job they want abroad.

Castro-Palaganas (2017) states that overseas employment is seen as a means for personal development since advanced professional learning and training may not be accessed in the Philippines but may be available in more developed countries. This is because across health professions, career opportunities in the Philippines are limited. These can be reflected in the testimonials of some participants when asked what their opinion is on the continuous rise of workers migrating to find employment. Some of their testimonials were:

"Migration for employment is necessary for some people financially. Other workers also seek better work experience since other more well-developed countries are more updated with their practices and innovations." - (21year-old female student)

Some medical technologists also seek better work experience since other more developed countries are more updated with their practices and innovations. In connection with this, training abroad allows healthcare professionals to utilize their abilities and skills to their full potential in the workplace as compared to practicing to what can be known as "outdated guidelines" and less than desirable working conditions (Castro-Palaganas et al., 2017; Fabiene et al., 2016) [10,15]. Participants further stated that medical technologists want to have a better future and tend to find it abroad rather than in the Philippines as there are more career opportunities for them there or for financial purposes. Hence, it is not unusual for them to migrate. Furthermore, a study conducted by the College of Medical Technology of the Lyceum of Batangas stated that many of their medical technology graduates have already resulted to work abroad in more developed countries such as Canada, Australia, and the United States after satisfying certain standardized "competency-based" certification examinations such as the

ISSN No:-2456-2165

American Society for Clinical Pathology (ASCP) Board of Certification (BOC) examination. These graduates were eventually able to practice the profession in varied areas of specialization in hospital-based clinical laboratories (Besares-Dayaganon, 2016) [6].

The previous points can be reflected in most participants who agreed to the question asking if it is important to have experience of practicing abroad at some point in their career. In reference to a study conducted by Awire (2020), medical students and doctors aspire to be the best in their fields, as well as to be relevant in any sphere of life they are in. Consequently, they also feel the need to develop and improve themselves beyond what was available to them through the healthcare system in their country. This general perception of the poor state and quality of medical education and training provided in their country, in general, was a driver of the aspiration for them to migrate to more developed countries. As a response to the question asking if their overall standing in the community will be improved if they practice abroad as compared to practicing in the Philippines, most participants agreed. These can also be reflected in the testimonials of some participants when asked what their opinion is on the continuous rise of workers migrating to find employment. Participants stated that these medical technologists cannot be blamed for wanting to seek greener pastures and better opportunities abroad career-wise as they are undercompensated, underappreciated, and less recognized in the Philippines.

"I think that healthcare workers seeking a better opportunity for them career-wise is acceptable especially with the current state of our country where healthcare workers are not given as much importance as they should be." - (20-year-old female student)

Majority of the participants also yielded a result of "strongly agree" when asked if they will experience a better job satisfaction practicing abroad compared to practicing in the Philippines. This can be supported by a study conducted by Castro-Palaganas (2017), wherein it was pointed out that local organizational settings, specifically dismal working conditions, are major factors in migration decision-making. For most of their participants involving different Filipino health worker groups, job satisfaction was a crucial factor in their migration decisions. On the other hand, when asked if their family will be better off with them practicing abroad, most participants strongly agree with the statement. This also reflects participants' testimonials on their opinion on the continuous rise of workers migrating to find employment. Some of their testimonials were:

"It's their choice. Because if they think that working abroad will give them a better life, we should not judge them. We only want what's best for our family, so we will do everything we can to give them what they deserve." - (23year-old female student)

According to Gorodzeisky (2014), labor migration of family members and the sending of remittances by these labor migrants back home can be viewed as a rational

strategy for economic survival adopted by many families in poor countries such as the Philippines. This is because it has been repeatedly demonstrated that the earnings of labor migrants are significantly higher than the earnings that they had prior to migration. In this context, they can remit a considerable portion of their income back home. As such, income of many households with labor migrants tends to be significantly higher than those of households without labor migrants.

> Income

As reported by Castro-Palaganas (2017), the Philippines is a low-income Southeast Asian nation with a young population of over 92 million people. In the same study, it was also stated that better salaries and working conditions are among the factors that influence the participants' decision to work abroad. In relation to this, a study conducted by Fan (2020) noted that to augment and diversify the income of poor and underdeveloped households, they often turn to migrant labor [16]. According to Banta & Pratt (2020) the unsustainable existence of local employment in the Philippines is one of the key factors influencing emigration of Filipino workers due to their inability to find suitable and appropriate employment in the country, which is due to the low wages offered by local businesses and jobs [5]. Correspondingly, The Philippine Star published a news article in July 2010 that identifies the several reasons why many local Filipinos choose to live abroad rather than in their home country. Two of the most common reasons for their migration, according to most locals, are a lack of work prospects and an inadequate amount of earnings or salaries to provide for their families' welfare. Several Filipinos have stated that the amount of effort they put into their jobs is not in any way proportional to the pay they get [48]. This is supported by the news article from CNN released on September 4, 2020 regarding the research data on the salary of Medical Technologists in the Philippines and in neighboring countries including Vietnam, Malaysia, and Singapore. Medical technologists in Vietnam earn around Php 57,000, while those in Malaysia earn around Php 82,000 and those in Singapore earn around Php 210,000. The salary of a medical technologist in the Philippines is significantly lower than in other countries, as evidenced by this data. As a result, this can be linked to medical technologists exploring work in other countries for a better salary benefit [17].

As shown in Table 1, the participants were assessed on their socio-economic status and majority of them appeared to be part of the upper-middle class (70%). Limpangog (2013) showed in his study that migration provided a route to a more liberating quality of life, enabling them to either restore their dwindling middle-class status in the Philippines or experiment with a new way of life in the new setting. The participants were asked on their opinion on the same entry-level salary grade of Medical Technologists in the Philippines since 1989 which was Php 23,877. Based on the qualitative analysis, this question resulted in four major conclusions on the job quality of Medical Technologists in the country. The need for higher salary, low satisfaction,

unjust treatment, and better benefits abroad were reflected in their answers. Some of their testimonies were:

"With the recent influx of workload due to the pandemic and with the rise of prices due to economic aspects, medical technologists should be given a raise. Having the same salary grade as they did since 1989 does not properly cover for their everyday living." (22-year-old, female student)

Consequently, Najib et al. (2019) states that healthcare professionals who are wary about the Brain-drain phenomenon are usually doctors and nurses searching for a better living atmosphere and income potential. The migration of health workers in search of a better standard of living and life quality, higher pay, access to advanced technologies, and more secure political conditions is referred to as "brain-drain" in the same study [35]. This is comparable to a medical technologist, as a health care worker, searching for better pay and a better quality of life in another country. The participants' statements agreed with these issues.

"Migration for employment is necessary for some people financially. Other workers also seek better work experience since other more well-developed countries are more updated with their practices and innovations." – (21-year-old, female student)

In relation to this the participants were also asked on their opinion on the continuous rise of workers migrating to find employment. Majority of their answers reflected that working abroad will bring about better benefits, higher salary, and greater opportunities.

"One of the reasons for migrating to find jobs abroad is the salary offer here in the Philippines. Compared to other countries, the salary of a medical technologist is way higher, and you can see how they recognize medtech as one of medical healthcare workers." — (22-year-old, female student)

In association with these responses, Hajian (2020) mentioned that poor income, an unfavorable socioeconomic condition, political uncertainty, a lack of professional and educational opportunities, as well as family and personal interests, have all been classified as major factors in migration ^[23]. Furthermore, Marcus (2014) explained that the economic-financial drive to move abroad is well documented, with 'pull' factors such as higher pay, a better lifestyle, travel opportunities, and career growth luring nurses out of developed countries, while 'push' factors such as low salaries, increased workload, and poor benefits motivate Filipino nurses to leave their homeland.

VI. MACRO-LEVEL FACTORS

➤ Political and Economic Situation

Labor migration has long been thought to be influenced by a mix of macro-, meso-, and micro-level demographic, socio-cultural, political, and economic factors. In a report published by Deluna in 2014 stated that the

country has benefited from remittances, in terms of migration, and the unemployment rate has decreased. However, the economic downside is that skilled workers have been displaced to other countries due to high wages and salaries. To avoid brain, drain, policies should be developed to improve the labor market [13]. As mentioned by Hajian (2020), poor socioeconomic conditions, political unrest, a lack of career and educational opportunities, as well as family problems, have all been identified as strong common driving forces behind migration [23]. The need for a greater quality of life, work and training prospects, and financial benefit were the most powerful pull factors. To assess the participants', experience they were asked for their opinion on what the government should do to encourage Medical Professionals to stay in the Philippines and practice instead of moving abroad. Based on the qualitative analysis, this question resulted in three major conclusions which were higher salary, competency practice, and to be more recognized. Some of the participants' testimonies were:

"Most of the reasons that people go to abroad is due to the financial stability, if the government would provide better financial support to them, they will most likely stay in the country" (20-year-old, female student)

Next, the participants were asked if they were aware of any bills or regulations that would benefit our healthcare employees and if so, which ones were they. Most of the participants responded "no" but stated that they are aware of the Magna Carta of Public Health Workers (MCPHW) and the Republic Act. No. 5527 which is known as the Philippine Medical Technology Act of 1969. In relation to this, Castro-Palaganas (2017) mentioned that The Magna Carta for Public Health Workers (MCPHW) of 1992 should be followed. The MCPHW was created to increase the number of health workers working in underserved areas by providing better pay and benefits. In addition, stakeholders have described unique retention schemes, the adoption of the Magna Carta for Health Workers, and strengthened facilities as policies that could enable HRH to stay in the Philippines. In agreement with Castro-Palaganas (2017), low wages and a prospect for better social, economic, and professional opportunities are one of the reasons why individuals would want to migrate. Tabuga (2018), also concurred that motivations for wanting to migrate are economic in nature. To cope with poor economic conditions in the country for survival, many Filipino families are dependent on remittances as a source of income [42, 43]. Overall, these play a major role in the Philippine economy as remittances constitute a sizeable portion of the Philippines' gross domestic product (~12%). However, it is noted that the socio-economic status and health of migrants in the destination country are affected by remittances. This resulted in migrant health workers unlikely seeking medical attention because they have a fear of losing their jobs, destabilizing the family financially or to be positioned in a regional or rural location (Marcus, 2014). Next, the participants were asked their opinion on the rising number of employees migrating to seek employment. In agreement, some of their statements were:

"I think that healthcare workers seeking a better opportunity for them career-wise is acceptable especially with the current state of our country where healthcare workers are not given as much importance as they should be" - (20-year-old, female student)

Many health professionals have been forced to seek jobs abroad due to inadequate funding of the healthcare system, which has resulted in unemployment or underemployment according to Castro-Palaganas (2017). Since the 1970s, the Philippines has been exposed to the migration culture. According to Castro-Palaganas (2017), the country undertook a series of structural reform initiatives under the supervision of the IMF and the World Bank to secure its foreign debts accumulated during the Marcos regime. However, these conditionalities instead contributed to increased poverty and economic instability in the country. A program encouraging and supporting the export of labor migrants was introduced in 1974. This was set up to help the nation fight unemployment while also providing a source of foreign currency. As a result, the Ministry of Overseas Contract Workers, as well as several non-government organizations, are assisting and supporting the policy (Gorodzeisky, 2014). He also stated that individuals have turned to migration as one of the most popular and rational methods for avoiding the negative effects of living and working in a weak and depressed economic environment. However, he also claimed that the migration flow is the product of an asymmetrical structural relationship between less economically developed regions and rich industrialized areas. As a final thought, the participants were asked if there was something more, they could do in the future to help give healthcare professionals more recognition than working overseas to improve the condition of succeeding healthcare workers. Their insights are the following

"Most likely expand the opportunities in different hospitals here in the PH especially in the public hospitals since the majority of the country's patients are admitted in public hospitals. Learn more practices and research" (20year-old, male student)

Finally, considering global developments, Marcus (2014) indicated that health professional migration represents the socio-political and economic situation in the Philippines. Healthcare workers in the Philippines are being pushed to work abroad because they are unable to match international pay requirements, have few job prospects, and are overworked. The political instability and persistent economic predicaments on the one hand, and the state's aggressive move to globalize its labor force on the other, resulted in an unprecedented out-migration and overseas work deployments, especially in the 1970s and 1980s according to Limpangog (2013).

➤ Intent to Work Abroad

Table 6 - Intent to Work Abroad

INTENT TO WORK ABROAD						
	Practice full-time in the Philippines	10	10			
Plan after graduating from BS Medical Technology	Continue to study Master of Science in Medical Technology	10	10			
	Teach Medical Technology subjects full-time	0	0			
	Practice abroad	17	17			
	Undecided	63	63			
Should you decide to go into practice, where do you prefer to practice?	Rural areas in the Philippines	4	4			
	Urban areas in the Philippines	19	19			
	Anywhere in the Philippines	11	11			
	Abroad or outside of the Philippine	53	53			
	Undecided	13	13			
Should you decide to practice in the Philippines, in	Private (for profit)	50	59			
	Private (non-profit)		4			
which sector	Public		27			
would you prefer to practice in?	Undecided		19			
Intent	Yes		50			
	No	32	32			
	Undecided	18	18			

According to the Manila Times (2013), the Philippine Association of Medical Technologists (PAMET) encouraged students to take up the Medical Technology program to help alleviate the shortage of medical technologists in the country [47]. However, even when the problem was addressed, the current pandemic has exposed the severity of the issue as in a report written by the UP COVID-19 Response Team (2020). It was stated that there is a ratio of 1.2 medical technologists per 10,000 population in the Philippines. In an article written by HealthCare Asia Daily (2017), the Philippines is currently suffering a healthcare crisis due to a deficit of healthcare professionals in the local healthcare system. It further states that this deficit is due to an increase in the migration of healthcare workers as well as a decrease in the number of students enrolling in medical school [25]. Agencies such as the World Health Organization (WHO) have tried exacting means to prevent the migration of professionals from one country and to control the influx of such individuals to their country of destination. Despite this, health workers are still driven to seek greener pastures elsewhere that offer benefits such as a higher wage and a better professional growth. The factors that were explored with relation to the intentions of students to work abroad yielded statistically insignificant results. This means that there is no one factor that stands out amongst the rest. This signifies that the student's motivation to migrate is prioritized by not only one specific factor, but all are equally important to them. For example, a participant, a twenty-oneyear-old male student gave a variety of reasons as to why he wishes to work abroad. The participant mentions that he was influenced by his father, a doctor working abroad, who told him that working in the healthcare field will give him a good future. He plans to work abroad as a medical technologist as this would be a good foundation since he would like to set up his own laboratory in the future. As he has such plans, he researched the requirements needed to migrate to another country as well the possible opportunities and income he will receive. Lastly, he also wishes for medical technologists to become more recognized and respectable as a profession. This participant is one of many that share similar sentiments regarding

VII. CONCLUSION

The study's objectives were to assess the proportion of Filipino 4th year Medical Technology students with the intention to work abroad, to determine the factors that influence their intentions and determine their preferred countries of destination. Based on the data gathered, out of 100 participants, 50% of them intend to work abroad. These factors determined by the study were categorized into a multilevel system divided into micro-, meso- and macrolevels which correlate and interact with each other. Microlevel phenomena include the participants' family context, education, and socio-demographics. The meso-level phenomena consist of the organizational settings and income, whilst the macro-level includes the political and economic situation. As mentioned in the methodology of the study, the factors explored were analyzed using descriptive and inferential statistics. The results generated statistically insignificant results which signifies that the student's motivation to migrate is prioritized by not only one specific factor, but all are equally important to them. Lastly, the preferred countries of destination of the study's participants are the United States of America (36%), Canada (33%), United Kingdom (8%), and others such as Australia, Singapore, and New Zealand. The researchers recommend that the collection of data and responses be conducted for a longer period as the data collection was only held for less than a month among 100 participants. It is also recommended for future researchers that aim to improve this topic, to widen the scope of participants to be surveyed. Ideally, this should include 4th Year Medical Technology students and/ or fresh graduates from different universities offering the program all over Luzon. This is to better assess responses from a wider range of participants that come from different socio-economic classes and backgrounds. Due to the limitations of the ongoing pandemic, the researchers conducted the study by means of an online survey. Should the situation improve, a face-to-face interview may be conducted with a selected number of participants to have a better understanding of the varied factors that influence their intentions to work abroad.

REFERENCES

- [1]. Arends-Kuenning, M., Calara, A. & Go, S. (2015). International Migration Opportunities and Occupational Choice: A Case Study of Philippine Nurses 2002 to 2014. IZZA Discussion Paper No. 8881, Available at SSRN: https://ssrn.com/abstract=2575061
- [2]. Arthur, J. (2019). Level of job satisfaction of filipino nurses in Attendo Oy, Finland. Retrieved September 29, 2020 from https://www.theseus.fi/bitstream/handle/10024/227415/Jimeno_Arthur.pdf?isAllowed=y&sequence=2

- [3]. Asadi, H., Ahmadi, B, Nedjat, S., Akbari Sari, A. Abolghasem Gorji, H. & Salehi Zalani, G. (2017). Factors affecting intent to immigration among Iranian health workers in 2016. Electronic Physician, 9(6), 4669–4677. https://doi.org/10.19082/4669
- [4]. Awire E, Okumagba M, 2020, 'Medical education in Nigeria and migration: a mixed-methods study of how the perception of quality influences migration decision making', MedEdPublish, 9, [1], 1, https://doi.org/10.15694/mep.2020.000001.2
- [5]. Banta, V., & Pratt, G. (2020). Surplused in Dubai: Filipino professionals as surplus entrepreneurs. Geoforum. doi: 10.1016/j.geoforum.2020.05.022
- [6]. Besares-Dayaganon, A.J. & Limjuco, Renan. (2016). Academic proficiency, internship performance rating, and the preparedness to ASCP certification of the medical technology graduates in Region XI: Basis for the enhancement of clinical internship curriculum. 14. 137-1260.
- [7]. Bilan, Y 2017 Migration of the Ukrainian Population: Economic, Institutional, and Sociocultural Factors. Pp. 247–257. London: Ubiquity Press. DOI: https://doi.org/10.5334/bbg.f. License: CC-BY 4.0
- [8]. Bourgeault, I.L., Runnels, V., Atanackovic, J., Spitzer, D., & Roberts, M.W. (2020). Hiding in Plain Sight: Gendered Dimensions of Health Worker Migration from "Source" Country Perspectives. Research Square. Pages 1-21, https://doi.org/10.21203/rs.3.rs-27542/v1
- [9]. Castelli, F. (2018). Drivers of migration: why do people move? Journal of Travel Medicine, 25(1). https://doi.org/10.1093/jtm/tay040
- [10]. Castro-Palaganas, E., Spitzer, D.L., Kabamalan, M.M.M., Sanchez, M.C., Caricativo, R., Runnels, V., Labonte, R., Murphy, G.T., & Bourgeault, I.L. (2017). An Examination of the Causes, Consequences, and Policy Responses to the Migration of Highly Trained Health Personnel from the Philippines: The High Cost of Living/ Leaving A Mixed-Method Study. Human Resources for Health, 15 (1). https://doi.org/10.1186/s12960-017-0198-z
- [11]. Dalanon, J., & Matsuka, Y. (2020). Forecasting Interest in Health Professions Education Based on Relative Search Volume Trends from the Philippines. Health Professions Education, 6(3), 368–375. https://doi.org/https://doi.org/10.1016/j.hpe.2020.04.01
- [12]. Dark Daily (2010). Why Clinical Pathology Laboratories Are Going Overseas to Hire Medical Technologists. Dark Daily. Retrieved from https://www.darkdaily.com/why-clinical-pathology-laboratories-are-going-overseas-to-hire-medical-technologists-1217/.
- [13]. Deluna, Roperto Jr & Pedida, Sunshine, 2014.

 "Overseas Filipino Workers Remittances, Inequality and Quality of Life in the Philippines," MPRA Paper 56070, University Library of Munich, Germany. Retrieved September 29, 2020 from https://ideas.repec.org/s/pra/mprapa.html
- [14]. Dumlao-Abadilla, Doris (2020). PH salary for nurses, med techs lowest in Southeast Asia. Inquirer. Retrieved from

- https://newsinfo.inquirer.net/1330556/ph-salary-fornurses-med-techs-lowest-in-southeastasia#ixzz6ZgRQ95Hm.
- [15]. Fabiene, E. E., & Kachchhap, S. L. (2016).

 Determinants of Employee's Commitment among Healthcare Professionals. International Journal of Academic Research in Accounting, Finance and Management Sciences, 6(2). https://doi.org/10.6007/ijarafms/v6-i2/2038
- [16]. Fan, C. C. (2020). Migrant Workers (A. B. T.-I. E. of H. G. (Second E. Kobayashi (ed.); pp. 73–80). Elsevier. https://doi.org/https://doi.org/10.1016/B978-0-08-102295-5.10286-0
- [17]. Filipino nurses, med techs lowest paid in Southeast Asia. (n.d.). Retrieved September 29, 2020, from htts://cnnphilippines.com/news/2020/9/4/Filipinonurses--med-techs-lowest-paid-in-Southeast-Asia-.html.
- [18]. Garcia, A. S., & de Guzman, M. R. T. (2020). The meanings and ways of parental involvement among low-income Filipinos. Early Childhood Research Quarterly, 53, 343–354. https://doi.org/https://doi.org/10.1016/j.ecresq.2020.05.013
- [19]. Gardner, K., Comello, R. J., & Watts, L. (2014). How Budget Issues Affect Technologists. Journal of Medical Imaging and Radiation Sciences, 45(2), 115– 118. https://doi.org/https://doi.org/10.1016/j.jmir.2013.11.0 01
- [20]. Gorodzeisky, A., & Semyonov, M. (2014). Making a living in two labor markets: Earnings of Filipinos in the global and the domestic economy. Research in Social Stratification and Mobility, 37, 77–89. https://doi.org/10.1016/j.rssm.2013.07.001
- [21]. Guevarra, A. R. (2010). Marketing Dreams, Manufacturing Heroes: The Transnational Labor Brokering of Filipino Workers. Piscataway, N.J.: Rutgers University Press.
- [22]. Guinto, R. L. L. R. (2012). Medical education in the Philippines: medical students' perspectives. The Lancet, 380, S14.
- [23]. Hajian, S., Yazdani, S., Jadidfard, M.P., & Khoshnevisan, M.H.. (2020). Factors influencing the migration intention of health professionals in low and middle income countries: Critical review with a theoretical model. Journal of Contemporary Medical Sciences. 6. 10.22317/jcms.v6i6.897.
- [24]. Hallmark Education Consultants International (2017). Bachelor of Science in Medical Technology. Hallmark Education Consultants International. Retrieved From https://www.hallmarksconsultancy.com/news/bachelor-of-science-in-medical-technology
- [25]. Healthcare Asia Daily. (2017). Shortage of Heath Professionals in the Philippines, a Growing Concern. Retrieved September 29, 2020 from https://www.healthcareasia.org/2017/shortage-of-health-professionals-in-the-philippines-a-growing-concern/
- [26]. Healthcare, B. P. A. (2019). Brain-Drain Phenomenon Among Healthcare Workers. International Journal of

- Public Health and Clinical Sciences, 6(3), 90–103. https://doi.org/10.32827/ijphcs.6.3.90
- [27]. Labrague, L. J., Gloe, D., McEnroe, D. M., Konstantinos, K., & Colet, P. (2018). Factors influencing turnover intention among registered nurses in Samar Philippines. Applied Nursing Research, 39, 200–206. https://doi.org/https://doi.org/10.1016/j.apnr.2017.11.0
- [28]. Labrague, L. J., McEnroe Petitte, D. M., Tsaras, K., Cruz, J. P., Colet, P. C., & Gloe, D. S. (2018). Organizational commitment and turnover intention among rural nurses in the Philippines: Implications for nursing management. International Journal of Nursing Sciences, 5(4), 403–408. https://doi.org/https://doi.org/10.1016/j.ijnss.2018.09.0
- [29]. Limpangog, C. (2013). Migration as a strategy for maintaining a middle-class identity: The case of Professional Filipino Women in Melbourne. ASEAS Austrian Journal of South-East Asian Studies 6(2), 307-329.
- [30]. Mackey, T. K., & Liang, B. A. (2012). Rebalancing brain drain: Exploring resource reallocation to address health worker migration and promote global health. Health Policy, 107(1), 66–73. https://doi.org/10.1016/j.healthpol.2012.04.006
- [31]. Marcus, K., Quimson, G., & Short, S. D. (2014). Source country perceptions, experiences, and recommendations regarding health workforce migration: A case study from the Philippines. Human Resources for Health, 12(1). doi:10.1186/1478-4491-12-62
- [32]. Maruja M.B. Asis Maruja M.B. Asis. (2019, July 19). The Philippines' Culture of Migration. Retrieved October 02, 2020, from https://www.migrationpolicy.org/article/philippines-culture-migration.
- [33]. Montayre, J., Neville, S., & Holroyd, E. (2017). Moving backwards, moving forward: The experiences of older Filipino migrants adjusting to life in New Zealand. International Journal of Qualitative Studies on Health and Well-being, 12(1), 1347011. doi:10.1080/17482631.2017.1347011
- [34]. Nagtalon-Ramos, J. K. (2017). Factors Affecting Graduate Degree Pursuit for BSN-Prepared Filipino and Filipino American Nurses Working in the United States. ProQuest Dissertations and Theses. University of Pennsylvania. Retrieved from https://search.proquest.com/docview/1954090471?acc ountid=17242.
- [35]. Najib, M., Juni, M.H., & Salloum, A. (2019). Braindrain Phenomenon Among Healthcare Workers. International Journal of Public Health and Clinical Sciences. 6. 90-103. 10.32827/ijphcs.6.3.90.
- [36]. Noden, B. H., Nowaseb, V., De Waal-Miller, C., & Van der Colf, B. E. (2015). Profile, perceptions, and future expectations of medical laboratory scientists in Namibia. African Journal of Laboratory Medicine, 4(1). https://doi.org/10.4102/ajlm.v4i1.246

- [37]. Organization for Economic Cooperation and Development. (2017). Interrelations Between Public Policies, Migration and Development. OECD Publishing. Paris, https://doi.org/10.1787/9789264265615-en
- [38]. Ortiga, Y. (2018). Learning to Fill the Labor Niche: Filipino Nursing Graduates and the Risks of the Migration Trap. Russell Sage Foundation. 4 (1). Pages 172-187, ISSN 23778261, DOI: 10.77558/rsf.2018.4.1.10
- [39]. Salami, B., Nelson, S., Hawthorne, L., Muntaner, C., & Hall, L. M. (2014). Motivations of nurses who migrate to Canada as domestic workers. International Nursing Review, 61(4), 479-486. doi:10.1111/inr.12125
- [40]. Silvestri, D. M., Blevins, M., Afzal, A. R., Andrews, B., Derbew, M., Kaur, S., Mipando, M., Mkony, C. A., Mwachaka, P. M., Ranjit, N., & Vermund, S. (2014). Medical and nursing students' intentions to work abroad or in rural areas: a cross-sectional survey in Asia and Africa. Bulletin of the World Health Organization, 92(10), 750–759. https://doi.org/10.2471/blt.14.136051
- [41]. Steinmetz, S., Vries, D. H. D., & Tijdens, K. G. (2014). Should I stay or should I go? The impact of working time and wages on retention in the health workforce. Human Resources for Health, 12(1). https://doi.org/10.1186/1478-4491-12-23
- [42]. Tabuga, A.D. (2018). Migrant Networks in the Context of Temporary Labor Migration. DP 2018-54. Philippine Institute for Development Studies
- [43]. Tabuga, A.D. (2018). A Probe into The Filipino Migration Culture: What Is There to Learn for Policy Intervention? DP 2018-02. Philippine Institute for Development Studies
- [44]. The Case of the Filipino Nurses. (n.d.). Retrieved September 29, 2020, from http://www.globalization101.org/the-case-of-the-philippine-nurses/.
- [45]. The Editors of Encyclopedia Britannica. (2020, May 19). Human migration. Retrieved October 02, 2020, from https://www.britannica.com/topic/human-migration.
- [46]. The ILO on Young People's Desire to Migrate. (2016). Population and Development Review, 42(4), 731–733. http://www.jstor.org/stable/44132241
- [47]. The Manila Times. (2013, October 26). Incoming college freshmen urged to take up Med Tech course. The Manila Times. https://www.manilatimes.net/2013/10/26/news/latest-stories/incoming-college-freshmen-urged-to-take-up-med-tech-course/48020/.
- [48]. The Philippine Star. (2010, July 13). "The Way You See It, Why Do Most Filipinos Choose to Leave Their Homeland and Live and Work Elsewhere?" Philstar.com, Philstar.com, 16 Oct. 2019, www.philstar.com/headlines/2010/07/13/592526/way-you-see-it-why-do-most-filipinos-choose-leave-their-homeland-and-live-and-work-elsewhere.

- [49]. Penny Wan, Y. K., Wong, I. A., & Kong, W. H. (2014). Student career prospect and industry commitment: The roles of industry attitude, perceived social status, and salary expectations. TStudent Career Prospect and Industry Commitment: The Roles of Industry Attitude, Perceived Social Status, and Salary Expectations, 40, 1–14. https://doi.org/10.1016/j.tourman.2013.05.004
- [50]. Yeates, N., & Pillinger, J. (2018). International healthcare worker migration in Asia Pacific: International policy responses. Asia Pacific Viewpoint, 59(1), 92–106. https://doi.org/10.1111/apv.1218