EIA 3005: GRADUATION EXERCISE

FEMALE LABOUR FORCE PARTICIPATION IN MALAYSIA

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DECLARATION OF ORIGINALITY OF WORK

I admit that this Graduation Exercise is my own work except the information, excerpts and references used have been acknowledged. I also admit that the contents of the Graduation Exercise are original and have not been submitted to the University of Malaya or other institutions for any other purposes. I am solely responsible for all the contents of this Graduation Exercise. Faculty of Economics and Administration and University of Malaya shall be absolved from any form of legal actions arising from this research.

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ABSTRACT

The main objective of this study is to analyse the participation rate of the female labour force in Malaysia in 2015. The female labour force participation rate is the per cent of the female population ages 15 and above are economically active, either by working or by looking for work. Since the independence of Malaysia, the participation of women tends to be lower than men labour force in the labour market. However, these gender differences in labour participation rate have been narrowing substantially in recent decades. The increase in the female labour force may due to education opportunities lead to a higher share of skilled occupations in women's employment. Bivariate analysis is used on the sample of 35,933 female labours out of 72,322 total labours in the dataset. The selected variables that affect the participation of women labour force are educational attainment, age of the female, state, stratum, ethnic group and marital status. Labour Force Survey 2015 is the main data source used in this study. The study found that the selected variables have a significant effect on female labour force status. In conclusion, cooperation from various authorities is essential to boost the participation of female in the labour market.

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LIST OF ABBREVIATIONS

DOSM	:	Department of Statistics Malaysia
LFS	:	Labour Force Survey
FLFP	:	Female Labour Force Participation
LQs	:	Living Quarters
EBs	:	Enumeration Blocks
MASCO	:	Malaysia Standard Classification of Occupations
ISCO	:	International Standard Classification of Occupations

CHAPTER 1: INTRODUCTION

1.1 Background of The Study

Since gaining independence in 1957, Malaysia had successfully to diversified its economy from only focused on the agriculture sector to one that plays an important role in manufacturing and services sectors (Yusof & Bhattasali, 2008). In conjunction with the growth of the economy, the country requires a large amount of labour. Malaysia is developing from time to time to achieve the goal of fair and equitable economic development distribution at all levels by introducing Shared Prosperity Vision (SPV) 2030 through the Twelfth Malaysia Plan and Thirteenth Malaysia Plan.

According to the Department of Statistics Malaysia 2019, labour force increased 2% in 2018 at nearly 15.3 million persons as compared to 2017. As usual, male labour force participation always higher than female's participation. The participation rate which is the proportion of the population in working ages of 15 to 64 years old increased marginally to 68.3% in 2018, from 68% in 2017. The statistics also showed that female labour force participation rose 0.5% to 55.2%. According to Labour Force Survey Report 2018, women commonly works as professionals (17.5%), clerical supports (15.7%) and service and sales workers (30.2%). These occupations normally require skills and patience that occupied by female. On the other hand, male labour force participation was 80.4%. Throughout the year, we can see that male labour was still higher than female. Table 1.1 shows the trend of female labour force situation in Malaysia.

The gender inequality in the labour market still exist critically in Malaysia. According to Figure 1.1, the highest female unemployment rate is 3.9% as compared to male (3.1%) in 2016. The unemployment rate of female was much higher than male throughout the past 20 years even though the female literacy and education level is increasing. This can be caused by Malaysia employers failed to offer work-life balance to employees. Many women have to sacrifice the tight working schedule for their familial responsibilities as well as some of the employers refused to accept them to return to the workforce (Boon, 2015). Women always faced the difficulties to get a job offer than male.

However, the increasing trend of female labour force participation indicates that the government has launched some initiatives to encounter the gender inequalities in the workplace. Our government is paying attention to this issue. Malaysia Education Blueprint Plan aimed to improve educational quality and build

sustainable skills on the global market. To secure the involvement of women in the labour force, the National Women's Policy and Action Plan (2009–2015) of Malaysia specified efforts to encourage the private sector to introduce flexible working practices to provide women with greater opportunities to engage in the workplace.

Table 1.1: Statistics of Female Labour Force in Malaysia from year 1999 to 2018

Year	('000)				(%)	
	Labour Force	Employed	Unemployed	Outside Labour Force	Labour Force Participation Rate	Unemployment Rate
1999	3,088.0	2,986.5	101.4	3,837.4	44.6	3.3
2000	3,399.9	3,295.7	104.2	3,807.9	47.2	3.1
2001	3,431.1	3,301.1	130.1	3,895.9	46.8	3.8
2002	3,533.9	3,400.8	133.1	4,035.4	46.7	3.8
2003	3,680.1	3,546.1	134.0	4,030.1	47.7	3.6
2004	3,731.1	3,589.1	142.0	4,166.9	47.2	3.8
2005	3,712.5	3,574.8	137.7	4,371.1	45.9	3.7
2006	3,785.4	3,656.8	128.7	4,485.5	45.8	3.4
2007	3,926.0	3,791.0	135.0	4,535.7	46.4	3.4
2008	3,953.5	3,808.5	145.0	4,694.6	45.7	3.7
2009	4,097.2	3,941.6	155.6	4,738.8	46.4	3.8
2010	4,348.4	4,191.7	156.8	4,951.2	46.8	3.6
2011	4,568.3	4,416.7	151.6	4,943.6	48.0	3.3
2012	4,802.6	4,651.0	151.6	4,890.7	49.5	3.2
2013	5,241.1	5,060.8	180.3	4,724.9	52.6	3.4
2014	5,440.4	5,265.1	175.4	4,694.9	53.7	3.2
2015	5,565.1	5,376.7	188.5	4,721.2	54.1	3.4
2016	5,655.7	5,434.0	221.7	4,757.9	54.3	3.9
2017'	5,766.5	5,563.3	203.2	4,770.5	54.7	3.5
2018	5,950.1	5,734.2	215.9	4,823.2	55.2	3.6

Sources: DOSM 2019

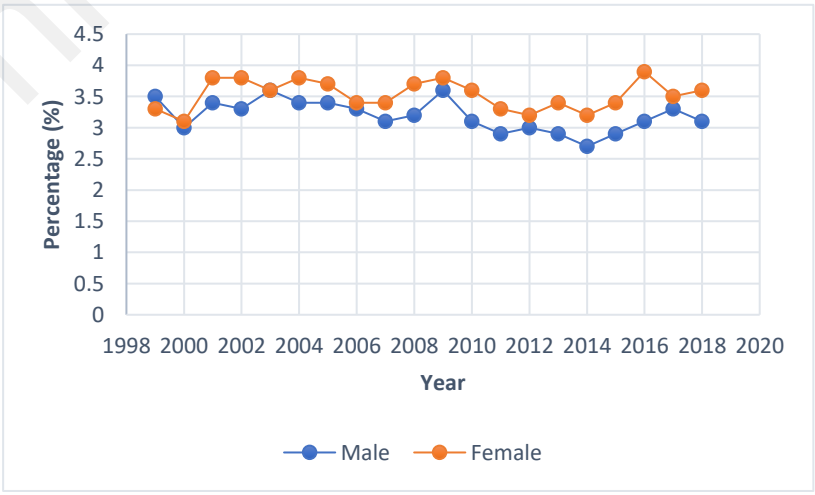

Figure 1.1: Unemployment Rate by Gender in Malaysia from year 1999 to 2018

Sources: DOSM 2019

1.2 Problem Statement

It cannot be denied that the gender gap in the labour market had happened for years. The gender inequalities continued to exist in Malaysia, even though the enrolment of female students in tertiary education is higher than male (Chung, 2019). Malaysia is working in heading to high-income level and wish to come out from middle-income trap. Towards the end, it has to optimize the ability of workers. Knowledge-based, creative and skilled workers are needed to drive Malaysia to a higher status of development. In this issue, female's contribution has to be valued and this can reduce the heavy reliance on foreign workers in many industries especially in professions field.

However, women have a higher barrier to enter workplace relative to men caused the gender gap in labour force. Half of the Malaysian working-age population are women but they constitute only two-fifth of the working population. In the 2018 Global Gender Gap Report published by World Economic Forum (WEF), Malaysia ranks 84th out of 149 countries in terms of *Economic Participation and Opportunity*, up 3 places from a year ago. However, we only rank higher to Indonesia (96th) among the ASEAN countries whereas most of the regional peers rank above us-Thailand (22nd), Singapore (24th), and Vietnam at 33rd. This indicates that Malaysian women always been neglected to have a chance to contribute in the economic activity.

Malaysia currently has one of the lowest female labour force participation in the region and in comparing with the countries at the same level of economic development. Even as the participation rate of women in the labour force has improved in recent years, it remains low, both in absolute terms and relative to the participation rate of men compared to some of the regional economies or the OECD average (Figure 1.2). Toh & Jaafar (2017) mentioned that starting a family and housework responsibilities are the reasons that women leave their job and does not return to the workforce. This causes the outflow of the talent which able to contribute to the economic growth.

In short, it can be summarized that a low rate of female participation in the workforce brings negative impact on economic development. This paper chooses Malaysia as the country of investigation to discuss and examine the relationship between socioeconomic variables and the female participation rate. As Malaysia is developing, high-skilled workers are needed but female labour with high education levels always been neglected. Therefore, this paper will contribute to the existing

knowledge on this issue to probe the difficulties of female labour as well as raise public attention.

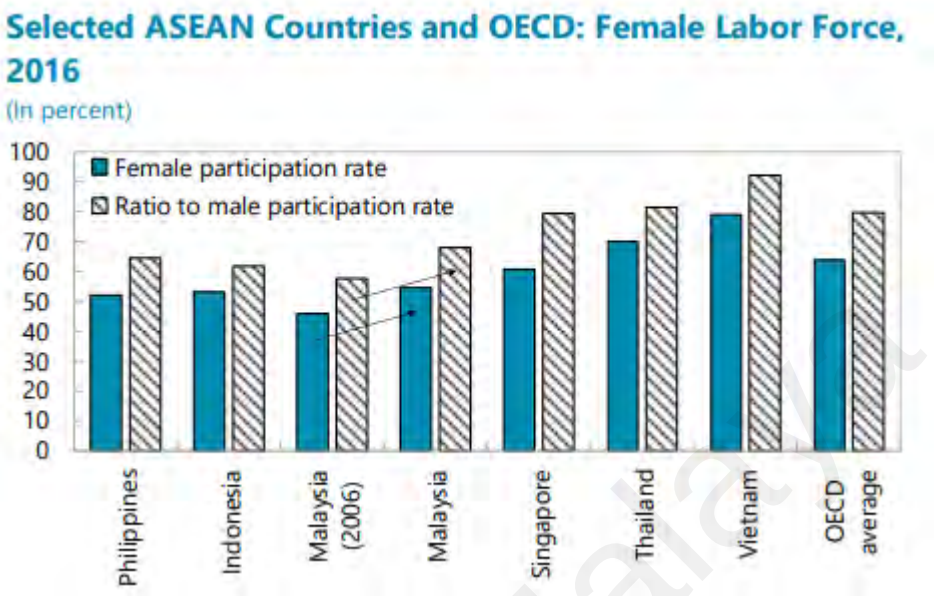

Figure 1.2: Female Labour Participation Rate and Ratio to Male Labour Participation Rate in Selected ASEAN Countries and OECD, 2016

Sources: DOSM; OECD, Stat; World Economic Forum, the Global Gender Gap Report, 2016; CEIC Data Co. Ltd; and IMF staff calculations.

1.3 Research Questions

1. What is the male and female labour force participation in Malaysia?
2. What is the level of female labour force participation in Malaysia by selected variables?
3. What is the relationship between female labour force status and each independent variable in Malaysia?

1.4 Research Objectives

1. To analyse the differentials in labour force participation in Malaysia by gender.
2. To examine the level of female labour force participation in Malaysia by selected variables.

3. To examine the bivariate relationship between female labour force status and each independent variable in Malaysia.

1.5 Contribution and Significance of Study

In this era of globalization, the Malaysia government realised that the gender gap in labour force should be shortened. Lower female labour participation rate as compared to male has raised an issue in this country. There are numerous research and studies on specific reason of low female participation rate but there is few on the overall situation of the female workforce in labour market in Malaysia by different determinants. Female labour force participation should be interpreted together with economic, socio-economic and socio-cultural factors (TAŞSEVEN, ALTAŞ & ÜN, 2016). Therefore, this paper aims to provide a more detailed on different determinants of female labour participation. Furthermore, the differentials in labour force market by gender will also be discussed in the study.

1.6 Scope of Study

According to International Labour Organization, the labour force participation is a measure of the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work. This paper will analyse female labour force situation in Malaysia for 2015 and examines the determinants of female labour force participation in Malaysia. The 2015 Labour Force Survey (LFS) conducted by the Department of Statistics, Malaysia (DOSM) will be used for analysis. The main factors in this study are demographic and socio-economic variables such as state, stratum, age, marital status, education attainment, and ethnic groups.

1.7 Structure of Study

This study will comprise of five chapters, which are introduction, literature review, methodology, results and lastly discussion and conclusion. Introduction provides the ideas of this research paper and objectives aimed to achieve at the end of the study. Literature review clarifies the theoretical framework of this research that summarized and revised from the past studies related to the factors affecting female labour force participation. Next, methodology explains the sets of method used in this study such as data collection method, detailed explanation on study variables and techniques used for data analysis. Results in chapter four present the comprehensive data findings of analysis by using tables, figures and graphs. In the end of the study, conclusions and limitations of this research are provided as well as the suggestions on policies implementation that will affect female labour force participation in Malaysia.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter attempts to review the past researches and studies pertaining to the situation of female labour force as well as the determinants of the female labour force participation rate. The background of the female workforce in Malaysia will be studied first then followed by empirical studies on each factor.

2.2 Understanding the Female Workforce in Malaysia

During the last four decades, Malaysia experienced rapid economic development and growth. Thus, it had created new employment opportunities for Malaysians. The transformation of economic structure from the agricultural sector to manufacturing and service sectors changed the labour's preference. The expanding employment, caused the demand for female labour for both skilled and unskilled, also increased align with the economic growth. This is due to the improved education attainment of female enabled them to be more demanded in all economic sectors. They could compete with men in the occupation which acquired different skills or more feminine traits such as service, clerical and related works and sales field. According to Labour Force Survey 2000, it is nearly half (47.5%) of all employed females were working in those three fields. Increasing job opportunities and income lead women have better living standard and economic status in Malaysia.

In 2018, a total of 15.2 million labour force in Malaysia as compared to 15 million in 2017. The female labour force participation rate rose 0.5% to 55.2%, from 54.7% in 2017. However, most of the population outside the labour force was female, recorded a total of 4823.2 thousand persons while the male who outside the labour force only 2271.3 thousand persons. The main reasons for female stayed outside the labour force were housework or family responsibilities which contributed 42.1% and they were still in school (41.6%) (DOSM, 2018).

Malaysia is rich in various resources and its strategic location has attracted the migrants from Southeast Asia, South Asia, the Middle East and African countries come to looking for job opportunities. Although the population growth in Malaysia was

relatively high in these few years, its expanding economy but relatively low labour force participation among women has increased the demand for migrant workers. According to International Labour Organization, official data from Immigration Department recorded 1.7 million foreign workers were employed with legal documentation in Malaysia during 2017. Out of the 1.7 million foreign workers, there was 0.3 million women workers which contribute 21% but it was relatively low compared to men which have 1.4 million in Malaysia. Mostly women foreign workers needed to perform low-skilled jobs such as cleaner, maid and manufacturing works.

There are some policies introduced by the government to increase the local female labour participation rate. In the Budget 2020 released in October 2019, wage incentives and income tax exemption offered to women to encourage them to return to the workforce. Bunyan (2019) in Malay Mail reported that Malaysian Employers Federation (MEF) executive director Datuk Shamsuddin Bardan mentioned that the incentives are given to new technologies, mechanisation and automation to modernise the job for them. These efforts wish to help reduce the reliance on female foreign workers.

2.3 Literature on Factors that Affecting Female Labour Force Participation

Female labour force participation (FLFP) always lower than male labour participation although the female graduating from universities is increasing and much higher than male. In 2017, 62% of public university graduates were women. Deputy Minister of Women, Family and Community Development YB Hannah Yeoh mentioned that work-life conflict and lack of family and employer support are among the main reasons cited for the low FLFP. New jobs or positions in the workplace tend to give women a sense of guilt, particularly as they may find it hard to reconcile new responsibilities at work with those at home. Most women end up losing their jobs or are hesitant in the first place to join the workforce (Chung, 2019).

Bloom, Canning, Fink, and Finlay (2009) found that a decline in fertility can bring the positive effect on the FLFP as the ratio of working-age to total population increased. A study conducted by Nam (1991) concluded that both the education level of women and the economic status of the family determine the FLFP in Seoul. For instance, longer schooling years and women came from the lower class family raised the likelihood of inclusion of women in the workforce. There is a greater chance for

married women to participate in the workforce if they belong to a metropolitan nuclear family. Hence, the following sub-sections elaborate on the explanatory variables identified in past studies, including age, marital status, state, highest education obtained, ethnic group and stratum.

2.3.1 Age

There are several studies reflected the effect of different age stages on the employment of the female labour. According to The State of Households 2018 released from Khazanah Research Institute, it stated that women's curves of the life-cycle have a similar shape. When women enter their 30s, the rate of participation in the labour force decreases gradually, although marginally, and then rise at a higher rate around their 40s. The decrease correlates with the traditional ages which Malaysian women will begin their families whereas the increase corresponds to the ages once their children reach a certain age then women will return to the workforce. Similarly, Auer and Cazes (2003) also found that the rate of atypical salaried employment arrangements increases significantly between age 25 and 35, as women return to work after raising children.

However, the disadvantage of being ' too young ' and ' too old ' has been found to have a greater impact on women than men, indicating that, at least in these age ranges, being female has served to exacerbate age discrimination and that ' double risk ' has been reinforcing rather than merely additive (Duncan & Loretto, 2004). Harris (2004) reveal that young women are often seen as beneficiaries of the modern world of work and learning, but this picture changes dramatically when a number of young women's experiences are taken into consideration. The economic changes that define late modernity, especially in the world of work, have had deeply divisive effects on young women.

Optimists may think that ageing and feminized workforce will only have a minimal impact on the performance of firms and labour markets. On the other hand, the study from Vandenberghe (2011) showed that employing a greater proportion of female workers between the ages of 50 and 64 might turn productivity into lower profitability. Nations where unions have a more widespread influence on labour market outcomes tend to have relatively low levels of employment among young

people, older people and women, and relatively high rates of unemployment among primed-age women (Bertola, Blau, & Kahn, 2007).

The study from Iweagu, Yuni, Denis N, Chukwudi, and Andenyangtso (2015) proved that age of female is extremely important in urban sectors and not rural areas, suggesting that age is somehow related to the expected qualification of women in urban sectors. Increase in early retirement age has a major impact on female labour employment as 10 percentage points rise among affected females in Austria (Zweimüller & Staubli, 2011).

2.3.2 Ethnic Group

Malaysia is a nation with multi ethnics and ethnicity plays a role in explaining the differential of female employment pattern. According to Mellström (2009), the ethnicity-based system for university enrolment that practised in Malaysia is of particular interest here, as the special privileges of Bumiputera have opened an arena for Malay girls to study the classic computer science subject which mainly dominated by men in western countries. Not surprisingly, as the very term indicates, the sense of community among the non-bumiputeras is much less pronounced. About half of non-bumiputera students said they were planning to enter the multinational job market in countries like the United Kingdom, United States, Australia, New Zealand, and Japan. Nonetheless, from New Economic Policy implemented by government of Malaysia in 1971, Metropolitan Chinese female actually gained more benefits than Malays who were mostly live in rural areas and also more than Indians who were more urbanize than Malays but much less than Chinese (Amin, 2004).

In the US, ethnicity problems also occurred in the employment of female. The paper from Sameroynina (2009) showed that the average earning of black nurses is more than white nurses although white nurses have greater endowments compared to black nurses. Besides, concurrence between whites and minority ethnic group was much less important for women than for men, and the position of women from certain ethnic minority groups actually worsen. Pakistani and Bangladeshi females remained totally low employment rates in England and Wales (Clark & Drinkwater, 2009). In addition, Lindley, Dale, and Dex (2004) also found that as compared to white women, Pakistani and Bangladeshi women have low levels of economic activity.

2.3.3 Marital Status

Marital status is one of the factors affecting the involvement of women in the workforce. A field survey carried out by students from Universiti Kebangsaan Malaysia showed that the number of children is a challenge for married women to participate in workforce thus childcare facilities need to be included in the workplace to give a helping hand to women (Sulaiman, Ismail, Othman, & Tin, 2012). However, result of a study from Aguero and Marks (2008) suggested that having children is not an obstacle for women to participate in the paid labour force for those who do not monitor their fertility actively.

Besides, it's difficult for women to combine having children and working at the same time as the lack of availability of jobs which provides affordable childcare. Married women who have a large number of children hard to commit full time for the jobs thus it involved large fertility costs (Del Boca & Pasqua, 2005). Therefore, a study which used German Socio-Economic Panel data showed that it is not surprising that women might resign after they boosted the first-birth rates in order to form a complete family (Kreyenfeld, 2009). Similarly, according to Halim, Aziz, and Samsudin (2016), marital status actually does not affect the women decided to leave the job market as much as motherhood does but the home responsibilities always forced them to be a housewife with no option.

The enactment of Equal Employment Opportunity Law (EEOL) caused positive effect on the women employment ratios as more females with tertiary education tend to marry late or stay unmarried thus the single women labour are more than married women labour in Japan labour market (Abe, 2011). Correspondingly, Lim (2018) mentioned that postponing marriage has paved the way for more women to enter and remain in the workforce at the expense of a reduced period of active reproductive life. In addition, the rural families have the awareness about both male and female need to take up the responsibilities together to cover the rising household expenditure in today's society. Therefore, the sensitisation of single women to take up paid jobs and not just wait for marriage to begin work could be strengthened (Iwaegu et al., 2015). According to Ashraf (2007), the female who stay unmarried could have a beneficial impact on the possibility of female presence in masculine-dominated occupation.

2.3.4 Educational Attainment

Education level always is the prerequisite consideration before the employer hire a new worker for female as well. U-shaped functional relationship demonstrating the correlation between economic growth and FLFP which theories suggested that the U-shaped curve implicitly or explicitly relies on economic growth being associated with increases in women's access to education (Hosney, 2016). Klasen (2002) stated that wage segregation between gender will stimulate the investment in the sectors that hire female workers if they have adequate education level to enter the labour force. Other than that, women need to obtain proper education as well as vocational training if they wished to grab the advantage of the opportunities accessible to them (Lawanson, 2008). Interestingly, it is found out that job seekers with vocational qualifications have relatively lower chances of unemployment than those with general education but it is vice versa during economic downturns and changing economic dynamics do not affect the risks of unemployment in education differentials for women (Klein, 2015).

Bratti (2003) believes that the knowledge gained increases the commitment of women to work, particularly highly educated women working even in the time surrounding a birth occurrence. Iwaegu et al. (2015) also indicated that the level of literacy is related with age is important for female employment in urban industries, suggesting that, as women grow older, they become more educated and thus have access to jobs, which is not the case with rural areas that are comparatively less qualified in terms of educational achievement. Therefore, to reduce high female unemployment rates, there is needed to increase the quality of education, offer more vocational training, create job creation programs, and remove barriers to female entrepreneurship (Roudi-Fahimi & Moghadam, 2006). Education is essential in order to improve the living standards of women and to allow them to engage more actively in the decision-making process within the family, the society, the place of employment and the political sphere (Bakar & Abdullah, 2007).

Highly educated women will choose to postpone their fertility due to the uncertainties in their careers (Kreyenfeld, 2009). However, Klasen and Lamanna (2009) indicated that increased female education in Middle East and North Africa (MENA) does not lead to higher labour force participation although the gender gap has been reduced by the trade-oriented industries.

2.3.5 Stratum

Stratum reflects the different economic status of females as they had been classified according to the economic activities, social status, education and income. Iwaegu et al. (2015) stated that females in rural areas are less qualified in terms of education level than metropolitan women thus they are less likely to participate in the labour force. Moreover, the urban woman who has had more births in the past year has less opportunity of joining the labour market than a rural woman who facing the same situation as they are more able to have idle women and girls to take care of their children in rural as compared to the urban females are always busy to cover their living costs while young girls are studying (Che & Sundjo, 2018). Nonetheless, per capita expenditure is essential in determining the participation of women in rural work, and this is anticipated a priori.

In addition, female labour had higher concentration in rural areas which mostly are agricultural sectors and this was carried out by the fact that the female LFPR in this sector in 1979 estimated to be 49.3 per cent compared to 45.0 per cent for urban sector (Yahaya, 1988). Similarly, in India as well, women do a lot of self-employment in both stratum whereas they involved in primarily agricultural in rural and mostly informal and small-scale manufacturing in urban areas (Olsen & Mehta, 2006).

According to Amin and Alam (2008), religion did influence the decision of rural married women whether to work in full-time or part-time however it is less influential in urban areas. This might cause by urban living can diminish traditional values as people adapt to market discipline. On the other hand, research from Roddin, Sidi, Yusof, Mohamed, and Razzaq (2011) discovered that there are a large number of single mothers especially in rural areas still trapped in poverty as they were ineffective as entrepreneurs, relying solely on government support and assistance.

2.3.6 State

The participation rate of female labour varies by states due to the demographic factor. The size of the state, the resources and the number of residents are the determinants of the economic level for each state. The growth of the economy in each state determine the rate of female labour participation as well.

According to Labour Force Survey Time Series Statistics by State, Putrajaya recorded the highest female labour force participation rate which remained above 70% from 2011 until 2018. On the other hand, the rate is the lowest in Perlis for most of the period but it increases rapidly from 35.9% in 2011 to 47.1% in 2018. From State Socioeconomic Report 2018 released by Department of Statistics Malaysia, the economic performance in Perlis grew by 3.3% as compared to 2.2% in 2017. This improvement contributed by the service sectors supported by government services sub-sectors and wholesale and retail trade.

Among the 13 states, Johor, Negeri Sembilan, Perlis, and Labuan have a significant increase in female LFPR from 2017 to 2018 which the rate increases above 3%. This indicated that female empowerment is rising for those states and government is working on that.

2.4 Female Workforce Framework

Based on the female labour force framework (Figure 2.1), the female population who are in the working-age 15 to 64 years old is categorized as labour force and not in the labour force. Labour force is divided into employed person and unemployed person. Both the categories of workers are participating in the economic activity either they are working or looking for jobs. The reverse is a person who is inactive (or outside the labour force), they do not work or even seek work as well.

Employees who are working part-time (time-related underemployed), full time (with low earnings) and with underutilized skills are considered as employed workers. They are underutilization of the productive capacity of the workforce in terms of working hours and use of skills. As some of the potential working persons are discouraged in searching for jobs and some are been forced to not seeking work such as housewives and students, so they are staying not in the labour force. Retirees and disabled person also categorized as they are outside the labour force. The labour underutilization rate (sum of employment and unemployment) should be a very useful tool as an indicator in analysing gender information in the labour market.

Figure 2.2 shows that there are few factors affect the participation rate of the female labour force. The population trends, fertility rate, household responsibilities and age of marriage are the closely-related factors to influence the decision of women

on participation in the workforce. Education level and economics incentives by government also will affect the employment of female.

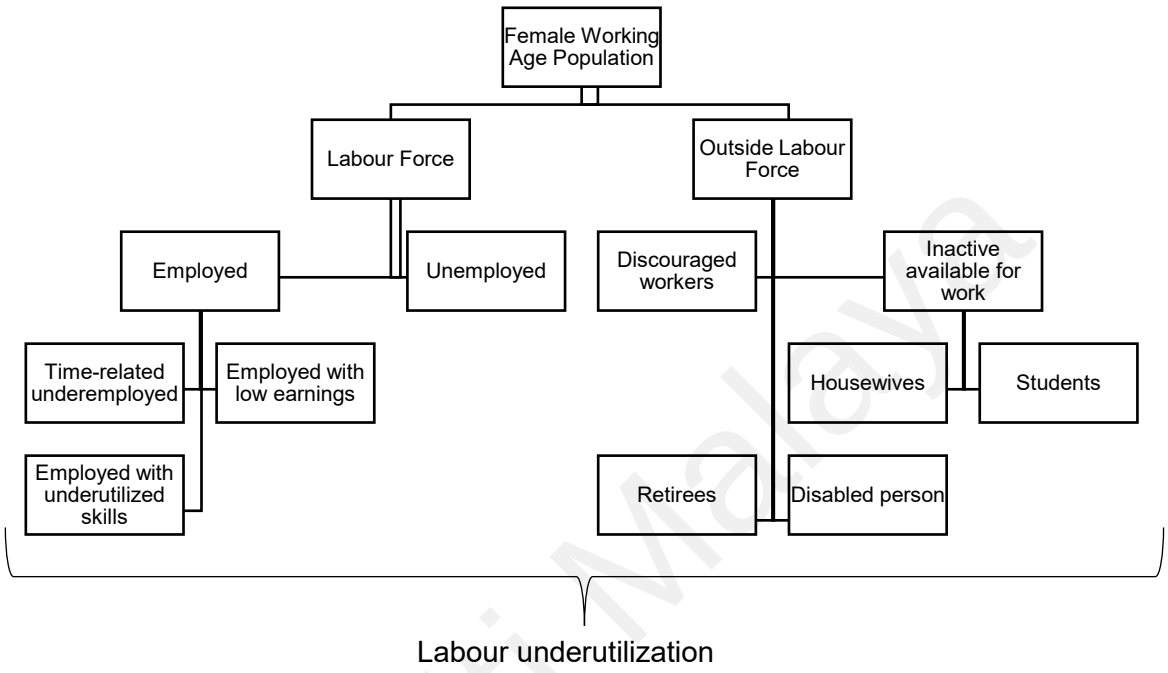

Figure 2.1: Female Labour Force Framework

Sources: Elder and Smith (2010) and Labour Force Survey Report 2019

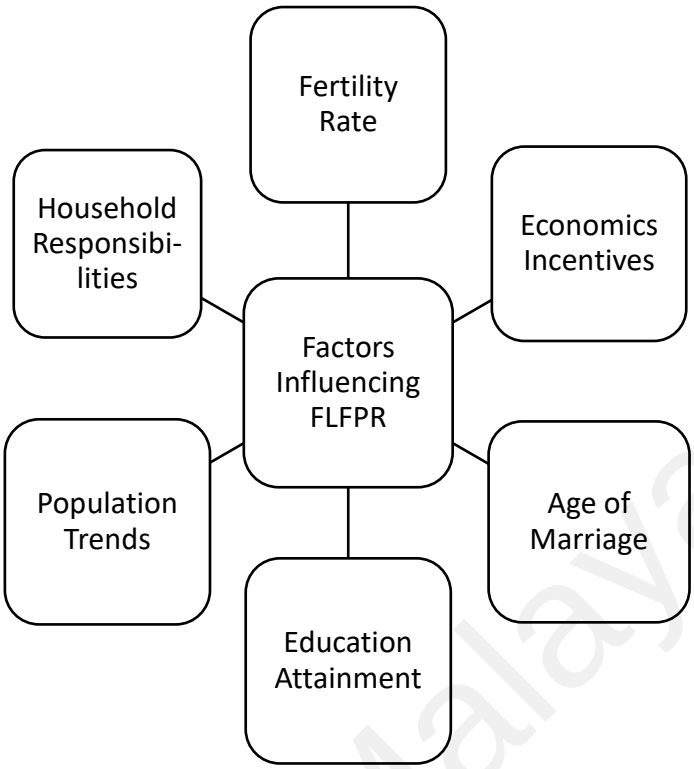

Figure 2.2: Factors Influencing Female Labour Force Participation Rate

Sources: Lim (2018), Bakar & Abdullah (2007) and Che & Sundjo (2018)

2.5 Summary

The evidences regarding the situation of female workforce and the factors influencing female labour to participate in workforce was provided in this chapter which the background of female labour in Malaysia was discussed then followed by the empirical studies of each factor. In the part of empirical studies, the literature on the relationship between each determinant and the female labour force participation for different countries was discussed.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter explains the methodology used in this study, from data source until data analysis techniques to achieve the objectives of the study. The data source will explain the source of data and the design of the data in more detailed. The research framework will give a brief idea of the linkage between the variables, followed by a brief description of the study variables. Lastly, data analysis technique will be discussed at the end of this chapter.

3.2 Data Source

This research study used secondary data, which is the Labour Force Survey (LFS) conducted in 2015. This annual survey was carried out by the Department of Statistics Malaysia (DOSM) through a household approach to obtain employment and unemployment structure information. The Labour Force Survey Report is an annual publication that presents the main population force statistics at the working-age of 15 to 64 years old by selected demographic and socioeconomic characteristics.

Two methods of data collection were used to collect the labour force data: personal interview and survey questionnaire. Interviewers who are trained visit households in selected living quarters (LQs) during the survey period to gather demographic information on all household members over the age of 15. Selected households will be interviewed for the second time to ensure the quality of data collection operation. Due to the advancement in technology, LFS data collection is made by using Computer-Assisted Telephone Interviewing (CATI). On the other hand, the survey questionnaire is designed to collect relevant information about the respondent population's social and demographic characteristics and detailed information about the labour force's economic characteristics (DOSM, 2015).

Both urban and rural areas of all states in Malaysia are covered in the LFS. People who live in private LQs is defined as the survey population, therefore persons who stay in hotels, hospitals, prisons and boarding houses are excluded. The sampling frame for the survey report is the National Household Sampling Frame which

enumeration blocks (EBs) created for the Population and Housing Census and was updated regularly. EBs are geographically contiguous land areas with defined borders created for survey activity purposes, which include about 80 to 120 LQs on average. All EBs are usually established within gazetted boundaries, i.e. within mukim or local authority areas (DOSM, 2015).

LFS adopted stratified two-stage sampling design. The primary strata is urban and rural which is EBs while the secondary strata is the states and administrative district within the primary strata (LQs within the EBs). Samples from the two stages are drawn randomly. The units are systematically selected with equal probability within each level of the secondary strata at each stage of selection. In LFS 2015, there are 12,165 EBs and 96,145 LQs have been selected in Malaysia. 35,933 female respondents are interviewed in 2015 (DOSM, 2015).

3.3 Research Framework

This study aims to study the female labour force participation in Malaysia. The status of female labour participation is categorised as employed, unemployed and outside the labour force whereas the background of characteristics such as age, marital status, ethnic group, educational attainment, stratum and state give the impact on the participation of female labour. Figure 3.1 below shows the variables that will be used in this study.

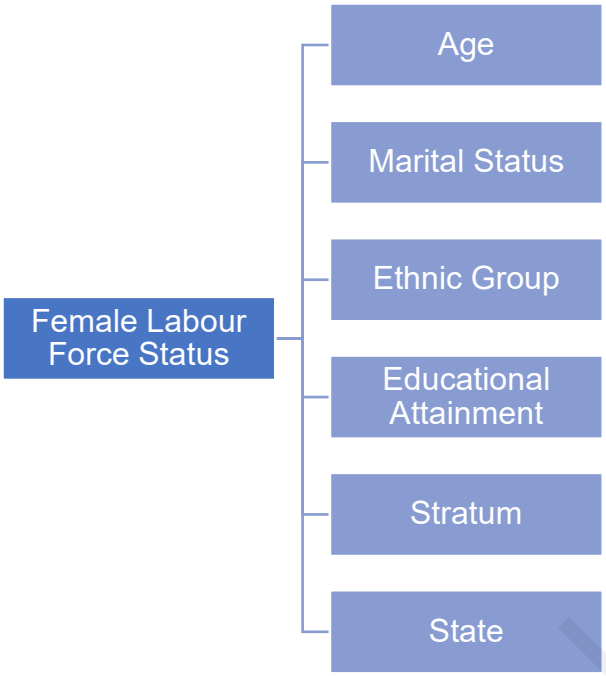

Figure 3.1: Research Framework

Sources: Labour Force Survey Report 2015

3.4 Study Variables

In this study, female labour force participation is the dependent variable and its status are divided into three groups: employed, unemployed and outside labour force. Employed person are all persons who worked at least one hour for pay while unemployed person is those who jobless currently whether it is actively unemployed or inactively unemployed. All persons who are not interested in searching for a job are classified as outside labour force.

There are 6 independent variables selected in this study. These independent variables included age, marital status, ethnic group, educational attainment, stratum and state. There are four categories under marital status which are never married, married, widowed and divorced or permanently separated. Besides, the age of the respondents refers to the working-age which is from 15 to 64 years old and who are either in the labour force or outside the labour force. As the age is numeric variable in the dataset, the variable was recoded into 5 categories to make it categorical variable as shown in table 3.1.

Malaysia is a multiracial nation. Ethnic group in Malaysia can be divided into Malay, Other Bumiputera, Chinese, Indian and others. Female contribution as a labour is different from each race. Furthermore, the LFS covers both urban and rural

areas. Urban areas are the gazetted areas with their adjoining built-up areas which have a combined population of 10,000 or more at the time of the 2010 Population and Housing Census while rural areas defined as all other gazetted areas with a population of less than 10,000 persons and non-gazetted areas (DOSM, 2015).

There is a total 13 states and 3 Federal Territory in Malaysia. The list of the states will be showed in Table 3.1. Educational attainment refers to the highest level in which a person has completed schooling or is currently attending school in a public or private educational institution that provides formal education. This can be categorised as no formal education, primary, secondary and tertiary education that obtained by the labour. The persons who have never attended school in any of the educational institution that provide formal education refer as no formal education; those whose highest level of education attained is from Standard 1 to 6 or equivalent refer as primary; those whose highest level of education attained is from Form 1 to 5 (including remove class), General Certificate of Education (GCE) O Level or equivalent refer as secondary; lastly, those whose highest level of education is above Form 5 refer as tertiary education (DOSM, 2015). Table 3.1 below showed the summary of variables used in this study.

Other than examining the factors affecting female labour force participation, the distribution of employed women by occupation also will be studied. The information on occupation is classified according to Malaysia Standard Classification of Occupations (MASCO) 2008 based on the International Standard Classification of Occupations (ISCO-08). Initially, the data of occupations was with 2-digit MASCO, but it was regrouped into 1-digit MASCO in this study. Table 3.2 showed the regrouped data with first digit number of occupations with 2-digit. For instance, office clerks (41) was recoded into major group with title Clerical Support Workers (4) as well as personal services workers (51) was recoded under Service and Sales Workers (5). For coding of each occupation listed, each major group was recoded according to their 1-digit number.

Table 3.1: Study Variables

Variable	Code	Classification
Sex	1	Male
	2	Female
Marital Status	1	Never Married
	2	Married
	3	Widowed/Divorced/Permanently separated
Age	1	15-24 years old
	2	25-34 years old
	3	35-44 years old
	4	45-54 years old
	5	55-64 years old
Ethnic Group	1	Malay
	2	Other Bumiputera
	3	Chinese
	4	Indian
	5	Others
Stratum	1	Urban
	2	Rural
State	1	Johor
	2	Kedah
	3	Kelantan
	4	Melaka
	5	Negeri Sembilan
	6	Pahang
	7	Pulau Pinang
	8	Perak
	9	Perlis
	10	Selangor
	11	Terengganu
	12	Sabah
	13	Sarawak
	14	Wilayah Persekutuan Kuala Lumpur
	15	Wilayah Persekutuan Labuan
	16	Wilayah Persekutuan Putrajaya
Educational Attainment	1	No formal education/Primary
	2	Secondary
	3	Tertiary

Source: Labour Force Survey Report 2015

Table 3.2: Occupation according to Malaysia Standard Classification of Occupations (MASCO)

2-Digit	Occupation	1-Digit	Job Title
11	Chief executives, senior officials & legislators	1	Managers
12	Administrative and commercial managers		
13	Production and specialized services managers		
14	Hospitality, retail and other services managers		
21	Science and engineering professionals	2	Professionals
22	Health professionals		
23	Teaching professionals		
24	Business and administration professionals		
25	Information and communications technology professionals		
26	Legal, social and cultural professionals		
27	Hospitality, retail and other services professionals		
31	Science and engineering associate professionals	3	Technicians and Associate Professionals
32	Health associate professionals		
33	Business and administrations associate professionals		
34	Legal, social, cultural and related associate professionals		
35	Information and communications technicians		
41	Office clerks	4	Clerical Support Workers
42	Customer services clerks		
43	Numerical and material recording clerks		
44	Other clerical support workers		
51	Personal services workers	5	Service and Sales Workers
52	Sales workers		
53	Education and social services workers		
54	Protective services workers		
61	Market-oriented skilled agricultural and livestock workers	6	Skilled Agricultural, Forestry, Livestock and Fishery Workers
62	Market-oriented skilled forestry, fishery and hunting workers		
63	Subsistence farmers, fisherman, hunters and gatherers		
71	Building and related trades workers, excluding electricians	7	Craft and Related Trades Workers
72	Metal, machinery and related trades workers		
73	Handicraft and printing workers		
74	Electrical and electronic trades workers		
75	Food processing, wood working, garment and other craft and related trades workers		
81	Stationary plant and machine operators	8	Plant and Machine Operators and Assemblers
82	Assemblers		
83	Drivers and mobile plant operators		
91	Cleaners and helpers	9	Elementary Occupations
92	Agricultural, forestry, farming and fishery labourers		
93	Mining, construction, manufacturing and transportation labourers		
94	Food preparation assistant		
95	Street and related sales and services workers		
96	Refuse workers and other elementary workers		

Source: Labour Force Survey Report 2015

3.5 Data Analysis Technique

IBM SPSS Statistics was used for analysing the data. Firstly, the data analysis began by showing the differentials in labour force status by gender, using crosstabulation.

Next, frequency and percentage distribution table were carried out for both dependent and independent variables after the male respondent in the dataset has been filtered out. Among the female respondents, percentage distribution was conducted to analyse their employment status by each independent variable and also the occupation participated among the employed female.

Lastly, the bivariate relationship between female labour status and the selected independent variables was observed by using chi-square test as only categorical variables included. The null hypothesis (H_0) and alternative hypothesis (H_1) are stated as below:

$$H_0: There\ is\ no\ relationship\ between\ female\ labour\ force\ status\ and\ each\ independent\ variable.$$

$$H_1: There\ is\ relationship\ between\ female\ labour\ force\ status\ and\ each\ independent\ variable.$$

The null hypothesis will be rejected when p-value in the test is less than 0.05 and vice versa.

CHAPTER 4: RESULTS

4.1 Introduction

This chapter will discuss the results of the study. Firstly, the first objective which is the differentials in labour force participation by gender will be analysed by constructing the graph in terms of their status and participation rate. Then, the profile of respondents will be presented using the Labour Force Survey 2015 data obtained from Department of Statistics of Malaysia (DOSM). The crosstabulation between female labour force participation status and each independent variable by age group will be carried out to examine the level of female labour participation followed by the testing bivariate relationship between female labour and each independent variable.

4.2 Differentials of Labour Force Participation by Gender

Figure 4.1 showed the graph of labour force participation status by gender in year 2015. The male respondents who been employed is much higher than the female which are 75.4% and 49.2% respectively. As a contrast, the female unemployment (1.6%) is lower than male unemployment rate (2.1%).

Moreover, the employment rate by sex from year 1999 to 2018 as displayed in Figure 4.2. The male labour force participation showed a reliable trend as the rate does not change much and maintained between 79% and 83%. However, the female labour employment trend demonstrated a positive increment throughout the 20 years although it rose in a slow path.

In summary, it cannot be denied that male has always high employment rate than female in Malaysia. However, the rose in women employment is the positive news to be concerned.

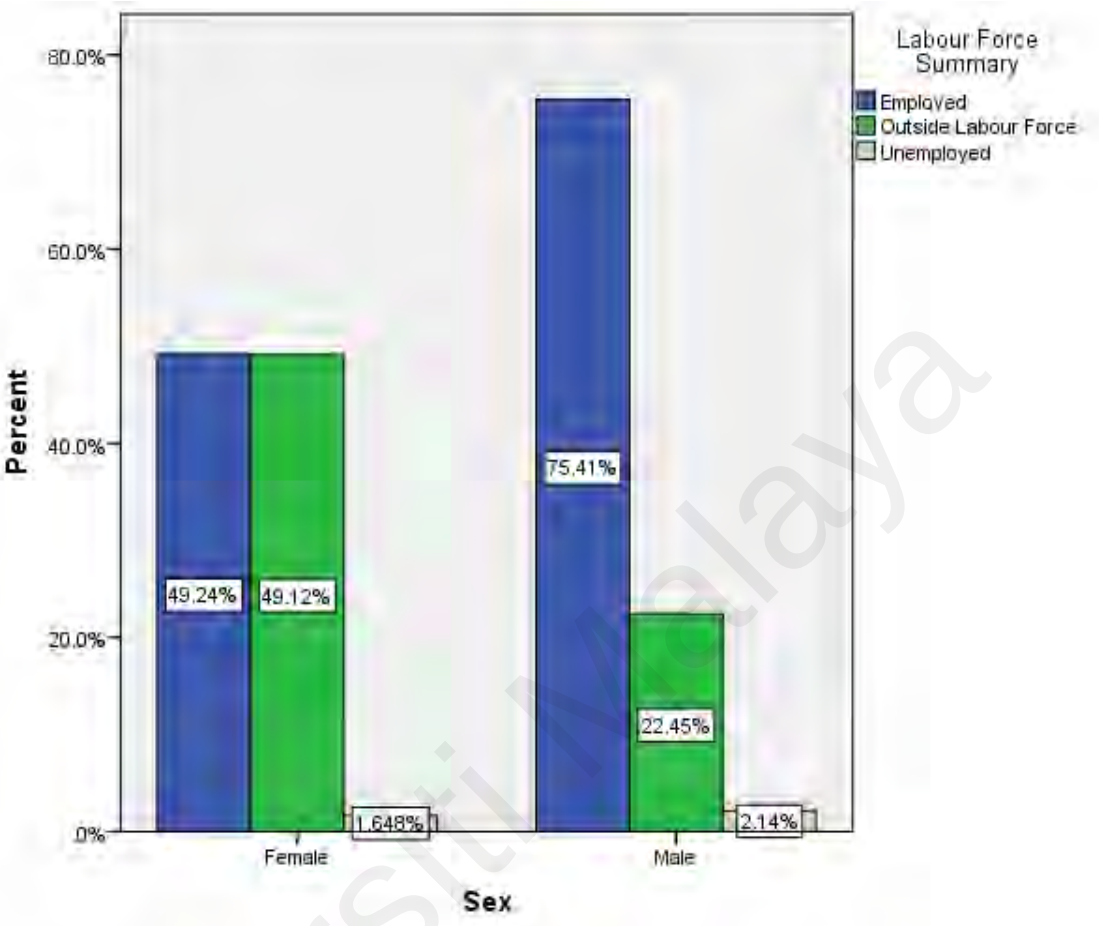

Figure 4.1: Bar Chart of Labour Force Participation Status by Sex in 2015

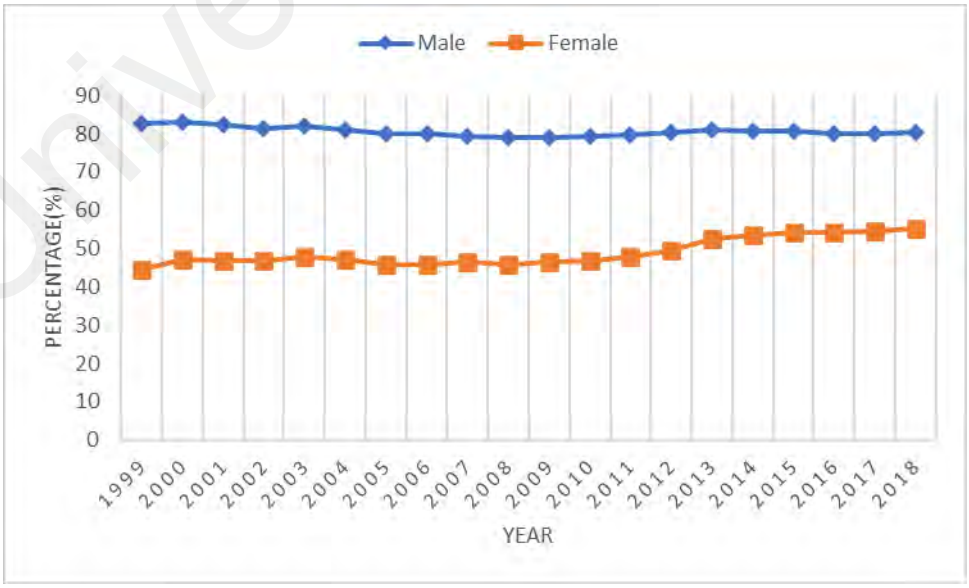

Figure 4.2: Labour Force Participation Rate by Gender from year 1999 to 2018

Source: DOSM 2019

4.3 Profile of Respondents

The status of female labour force participation, socio-economic and demographic profile of respondents is presented in table 4.1 below. Of the 35,933 female respondents, 49.2% was employed, 1.6% was in unemployment status and 49.1% stayed outside labour force. It was found that the percentage of female employment and outside the labour force were about the same as they only have 0.1% slightly difference. About two-thirds of the female respondents located in urban areas while the remaining one-third was in rural areas. More than half of them (59.2%) are married, 33.1% never married and only 7.7% are widowed, divorced or separated permanently from their partner.

Over the educational attainment, most of them (52.9%) graduated with secondary level, 28.2% with tertiary level and the least (18.8%) only with no formal education or primary level. Among the female respondents, 26.7% aged 15 to 24 years old, 22.0% aged 25 to 34 years old, 18.9% aged 35 to 44 years old, 18.3% aged 45 to 54 years old and 14.0% aged 55 to 64 years old.

Attributing to ethnicity variable, over half of the respondents are come from Malay (59.2%), next is Chinese (17.7%), followed by other Bumiputera (11.4%), Indians (6.3%) and lastly other ethnics (5.3%). Finally, looking at the states variable, majority of the respondents live in Selangor (9.7%), Sabah (9.4%) and Johor (8.2%). There are a few states with less than 5% of respondents, Kuala Lumpur (4.5%), Perlis (3.6%), Labuan (1.3%) and Putrajaya (1.2%).

Table 4.1: Profile of Respondents

Variables	Categories	Percent	Frequency
Female Labour Force Summary	Employed	49.2	17692
	Unemployed	1.6	592
	Outside Labour Force	49.1	17649
Stratum	Rural	32.5	11695
	Urban	67.5	24238
Marital Status	Married	59.2	21276
	Never married	33.1	11884
	Widowed/Divorced/Permanently separated	7.7	2773
Educational Attainment	No formal education/Primary	18.8	6773
	Secondary	52.9	19023
	Tertiary	28.2	10137
Age Group	15-24 years old	26.7	9601
	25-34 years old	22.0	7922
	35-44 years old	18.9	6782
	45-54 years old	18.3	6591
	55-64 years old	14.0	5037
Ethnic Group	Chinese	17.7	6357
	Indians	6.3	2272
	Malay	59.2	21289
	Other Bumiputera	11.4	4106
	Others	5.3	1909
State	Johor	8.2	2941
	Kedah	7.2	2597
	Kelantan	7.2	2573
	Melaka	6.6	2357
	N.Sembilan	5.6	2007
	P.Pinang	6.3	2265
	Pahang	8.1	2903
	Perak	7.0	2499
	Perlis	3.6	1298
	Sabah	9.4	3387
	Sarawak	7.9	2855
	Selangor	9.7	3496
	Terengganu	6.2	2229
	W.P.Putrajaya	1.2	423
	WP Labuan	1.3	484
	WPKL	4.5	1619

4.4 Level of Female Labour Force Participation in Malaysia by Selected Variables

Table 4.2 showed the female labour force participation rate by age across the different socio-economic and demographic variables. Female aged 25 to 34 years old participated the most in the labour force (68.4%), followed by the one aged 35 to 44 years old (65.2%) while 15 to 24 years old female contributed the least (25.4%). Putrajaya recorded the highest rate of female employment which contributed 76.4%. Perak has the lowest female labour force participation rate across the states (41.30%). Putrajaya has the highest female labour participation rate across the states for all the age groups except for the group of aged 15 to 24 years old. Surprisingly, Labuan has among the highest female labour force participation rate for women aged 15-24 years old, but recorded the lowest labour force rate for young (25-34 years old) and middle-aged lady (35-44 years old, 45-54 years old) which are 55.1%, 47.3% and 40% respectively across the states.

There is a slight difference among the stratum. The city area with a higher percentage (50.5%) followed by rural area (46.6%). This indicated that female more likely to get employed in an urban area. This also parallels across the age groups but not for the female who aged 55 to 64 years old as the proportion in rural (36.7%) is higher than urban (30.8%). On the other hand, others ethnics such as Kadazan Dusun, Bajau, Iban, etc followed by Chinese had more than half of percentage for being employed which are 58.9% and 50.1% respectively. Others ethnic is highest percentage of employed female aged 15 to 24 years old (48.2%); Chinese is leading in the age group from 25 to 44 years old (76.3% and 66.6% respectively); Malay is in the age group from 45 to 54 years old (59.2%); other Bumiputera is in 55 to 64 years old (42.8%).

For marital status, female with widowed, divorced or permanently separated status are more likely to be employed with the highest proportion, 55.6%. In comparison, the rate of married women been hired are the lowest after the 15 to 24 years old stage. The percentage are 61.6%, 62.0%, 55.0% and 31.4% for aged 25 to 34, 35 to 44, 45 to 54 and 55 to 64 respectively. Lastly, female labour force participation rate is the highest among those with tertiary educational attainment (58.7%). However, only 20.7% of female respondents aged 15 to 24 years old with tertiary educational attainment are employed as they are mostly university or college students that are still studying. On the other side, females with no formal education or

only primary education are less likely to have employment after they aged 15 to 24 years old.

Table 4.2: Female labour force participation rate by age and selected variables

		Age (years old)				
	Overall	15-24	25-34	35-44	45-54	55-64
Overall	49.2%	25.4%	68.4%	65.2%	57.1%	32.9%
State						
Johor	47.30%	30.2%	68.5%	58.1%	49.9%	26.3%
Kedah	48.70%	24.4%	67.6%	64.9%	57.9%	41.5%
Kelantan	45.90%	18.7%	61.4%	67.6%	63.9%	39.6%
Melaka	52.70%	26.8%	75.4%	69.5%	61.4%	38.8%
N.Sembilan	48.10%	21.9%	66.9%	65.6%	55.2%	32.6%
P.Pinang	53.60%	28.8%	76.6%	68.6%	54.9%	36.4%
Pahang	50.80%	26.9%	68.7%	66.4%	58.6%	34.2%
Perak	41.30%	26.1%	62.5%	58.8%	45.4%	18.7%
Perlis	43.00%	23.7%	64.1%	58.1%	53.7%	20.6%
Sabah	47.00%	26.8%	57.3%	62.2%	56.4%	38.0%
Sarawak	50.40%	25.1%	64.7%	62.6%	59.0%	41.2%
Selangor	56.40%	25.7%	78.0%	74.7%	68.1%	29.9%
Terengganu	41.90%	22.0%	56.1%	58.9%	54.5%	30.5%
W.P.Putrajaya	76.40%	29.6%	90.4%	87.5%	92.3%	50.0%
WP Labuan	42.40%	30.0%	55.1%	47.3%	40.0%	33.3%
WPKL	56.10%	27.2%	80.0%	71.9%	57.9%	29.7%
Stratum						
Rural	46.6%	24.0%	62.2%	63.7%	56.7%	36.7%
Urban	50.5%	26.1%	70.8%	65.8%	57.2%	30.8%
Ethnic Group						
Chinese	50.1%	26.6%	76.3%	66.6%	54.9%	30.8%
Indians	44.0%	21.4%	65.1%	60.0%	46.8%	26.5%
Malay	49.2%	24.1%	69.9%	66.4%	59.2%	33.1%
Other Bumiputera	46.4%	24.8%	54.6%	60.9%	56.1%	42.8%
Others	58.9%	48.2%	65.9%	63.8%	58.7%	34.3%
Marital Status						
Married	53.9%	39.2%	61.6%	62.0%	55.0%	31.4%
Never married	39.5%	23.5%	83.4%	82.0%	71.4%	44.9%
Widowed/Divorced/ Permanently Separated	55.6%	55.3%	80.5%	84.2%	65.9%	35.1%
Educational Attainment						
No formal education/ Primary	41.9%	38.4%	47.6%	55.4%	49.4%	31.6%
Secondary	46.8%	27.6%	61.2%	58.6%	53.9%	33.2%
Tertiary	58.7%	20.7%	81.1%	85.6%	82.4%	41.6%

4.5 Occupational Distribution among Female Workers

Figure 4.3 displayed the percentage distribution of employed female by Malaysia Standard Classification of Occupations (MASCO). Among the employed women, majority participated in the service and sales occupation, which is 31.35% followed by clerical support (16.02%). These results interpreted that the two popular occupations only required semi-skilled from the workers. However, there is 14.91% of employed female, which is the third-highest proportion participated in professional job such as health, teaching, science and engineering, etc that required the high education and techniques qualification.

On the other hand, least of the employed women were managers (2.334%), followed by skilled agricultural, forestry livestock and fishery (5.415%), plant and machine operators and assemblers (5.573%), craft and related trades (6.336%), technicians and associate professionals (8.298%) and elementary occupations (9.761%). These were less popular jobs among the employed women.

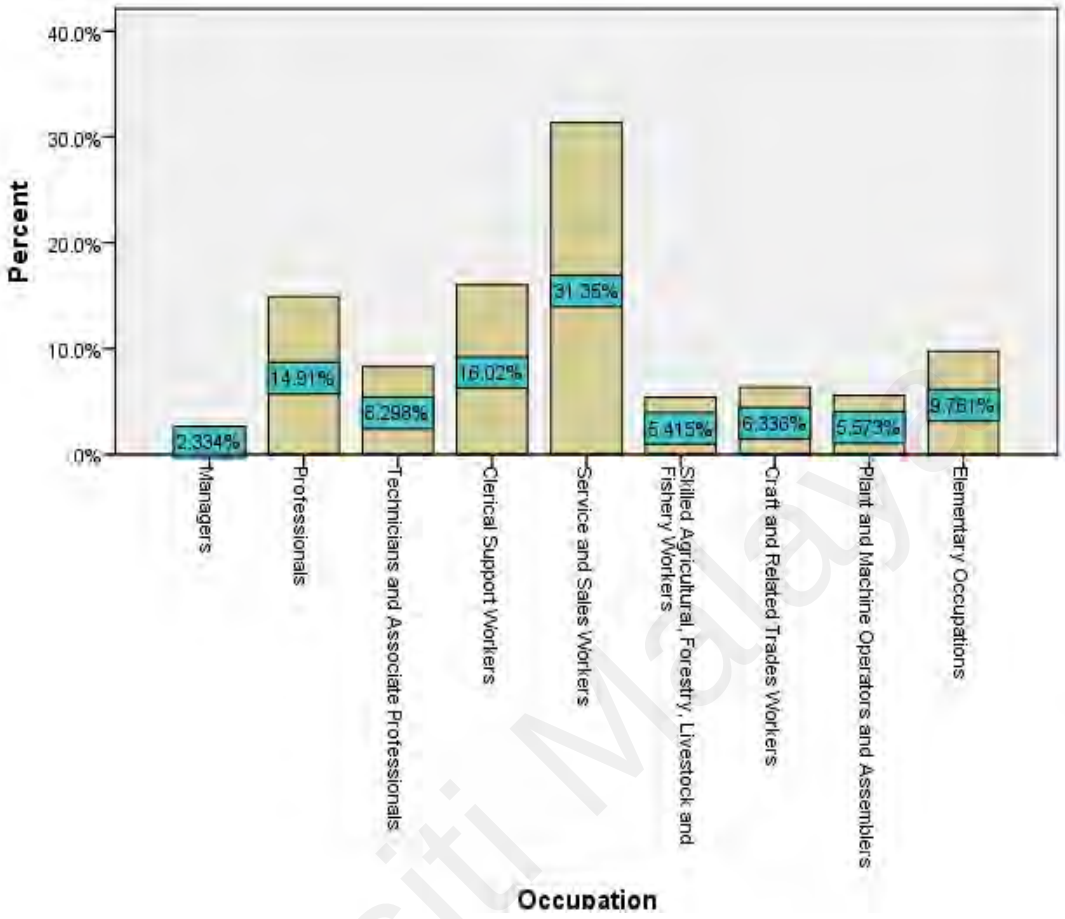

Figure 4.3: Percentage distribution of employed female by MASCO

4.6 Testing Bivariate Relationship between Female Labour Force Status and Each Independent Variable in Malaysia

This section presents the bivariate relationship between female labour force status and each independent variable selected using the appropriate analytical technique. Chi-Square test of independence was used to examine the relationship as all the variables are categorical form. The null hypothesis (H_0) and alternative hypothesis (H_1) are stated as below:

$$H_0: There\ is\ no\ relationship\ between\ female\ labour\ force\ status\ and\ each\ independent\ variable.$$

$$H_1: There\ is\ relationship\ between\ female\ labour\ force\ status\ and\ each\ independent\ variable.$$

Table 4.3 demonstrated the results from Chi-Square test. There is sufficient evidence to reject the null hypothesis for each of the hypothesis testing in the six variables below since the p-value is 0.000, which less than 0.05. It can be concluded that the bivariate relationship between each independent variable and female labour force status is significant.

Table 4.3: Results of Chi-Square test of independence

Variables	**Pearson Chi-Square**	**df**	**p-value**
State	480.984	30	0.000
Stratum	48.752	2	0.000
Ethnic Group	144.513	8	0.000
Marital Status	1215.169	4	0.000
Educational Attainment	782.696	4	0.000
Age	5165.529	8	0.000

CHAPTER 5: DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter will provide a discussion and summary of the key findings from previous chapters on the female labour force participation in Malaysia. The recommendations for improving the participation of women in the workforce and the limitation of this study will also be discussed in this chapter.

5.2 Summary and Discussion

To summarize, this research paper is an analysis of female labour force participation in Malaysia by age, marital status, state, educational attainment, stratum and ethnic group. Next, the effect of the socio-economic and demographic variables on the participation also be examined through the statistical tool which is Chi-square test. The results showed that all the selected independent variables were significant with the involvement of female in the workforce. It indicated that age, marital status, state, educational attainment, stratum and ethnic group have a significant effect on the female labour force status.

Based on the outcome from the differentials of labour force participation by gender, male was more likely to be employed than female. This situation has remained continuously throughout the 20 years as well. This was parallel across the statistics shown by DOSM (2018) about the inequality of gender in the workforce. Male labour force participation rate always stayed about 80% while the female labour participation rate between 40% and 60%. Also, the proportion of the females stayed outside the labour force is much higher than male as most of them are housewives and students.

From the analysis of age variable, over half of the women in age groups 25 to 34 and 35 to 44 years old participated in the labour force (68.4% and 65.2% respectively). Correspondingly, the study from Auer and Cazes (2003) recorded the rate of atypical salaried employment arrangements increases significantly between age 25 and 35. On the other hand, female labour force participation rate for women in the age group between 55 to 64 years old was the second-lowest (32.9%) across all the age groups and this proved by a study from (Vandenberghe, 2011; Bertola,

Blau, & Kahn, 2007) which the prime-aged female workers might turn the productivity into lower profitability thus they have a lower level of employment.

Then, the female labour force participation rate by age across the variables selected had been examined. Women who live in the city area has a higher percentage to be employed than who live in a rural area. This entirely matched with the study from Iwaegu et.al (2015) which mentioned that most females in rural area are with low education level are less competitive to get employed. Moreover, Roddin, Sidi, Yusof, Mohamed, and Razzaq (2011) research implied that there is a large number of poor single mothers especially in rural areas still relying on the assistance from the government.

Aside from stratum, the level of female labour participation is varied by ethnic groups. Overall, others ethnic tend to have the highest percentage to be in employment status among all the ethnics. However, Chinese women are leading in the age group from 25 to 44 years old. The research conducted by Amin (2004) showed a partially similar result. He referred to the implementation of New Economic Policy brought benefits to Chinese female than Malay and India who mostly live in urban areas.

Marital status also played an important role in determining the employment status of female. Most of the employers hesitated to hire married women aged between 25 to 64 years old compared to women with single and widowed, divorced or permanently separated status. This finding was consistent with the prior studies (Del Boca & Pasqua, 2005; Kreyenfeld, 2009; Halim, Aziz, and Samsudin, 2016) which having child and home responsibilities always forced them to leave the workforce in order to form a complete family. Besides, (Abe, 2011; Lim, 2018) indicated that women chose not to marry or postponed marriage to secure their job thus the married female labour aged between 25 to 64 years old was much lesser than single female labour.

The result of data analysis displayed that the level of education obtained by female affected their employment rate positively. Female with tertiary education qualification had the higher percentage to obtain a job. This was perfectly matched with the previous papers (Hosney, 2016; Klasen, 2002; Lawanson, 2008) which women with adequate education level result in the chance to compete with men to be hired. Bakar and Abdullah (2007) pointed out that female who able to access to education allowed them to participate actively in the decision-making process. The bivariate relationship revealed that educational attainment significantly affected the

female labour force status, however, the research from Klasen and Lamanna (2009) presented the opposite, rise in female access to education does not lead to higher participation of female in the workforce.

In conclusion, all of the selected independent variables have significant relationship with the female labour force status. Putrajaya, Selangor, Kuala Lumpur, Pulau Pinang and Melaka have been ranked as the top 5 states in the employment rate of female labour. As a whole, Malaysia is experiencing a positive increment for female labour force participation over the past 20 years.

5.3 Recommendations of Study

This study suggests a few recommendations to increase the female labour force participation, which firstly, reduce the duration of study by minimizing the length of semester break and period of releasing of the examination results. Next, to introduce the active labour market policies to strengthen the job search skills. Lastly, the government's effort to encourage female to be an entrepreneur by provision of loan and assistance especially in rural areas.

5.3.1 Reducing the Duration of Study

The proportion of female stayed outside the labour force is high because of most of them are students thus they are unable to work. The education system in Malaysia took the teenagers over the years to complete the studies. Furthermore, the gap between the level of education should be reduced as secondary school students need to wait about 5 to 7 months on average to receive the examination results and pursue the pre-university level for public schools. Then, another 8 months more spent for Sijil Tinggi Pelajaran Malaysia (STPM) or Form 6 students to enter the public university. Therefore, the releasing of results and date of open schools should be moved forward to prevent the time-wasting. Besides, shorten the length of school holidays for primary and secondary education and semester break for tertiary education can help students to complete their degree program in the earlier year. Hence, they can enter the working society sooner rather than spent all the time on waiting to receive results and enter school.

5.3.2 Introducing the Active Labour Market Policies

The participation rate of women aged at or after 44 years old in the workforce had declined caused one of the issues that primed-age women are difficult to secure a job. Hence, the government should stimulate the participation rate through the active labour market policies such as training, education and short-term investment. Computer class, language lessons, etc can be offered at a low or discounted price as nowadays those techniques are important for an employer to hire an employee who consistent with technology changes. These intensions are believed to be effective in raising the probabilities of employment. This effect is particularly strong for older and less-skilled women.

5.3.3 Encouraging Female Entrepreneurship

There is a low number of women-owned business in Malaysia. It is assumed that child caring, home responsibilities and fund-collecting are the obstacles for them to enter the entrepreneurship sector. Therefore, this study suggests to enhance the current effort to help women by providing more assistance with seminar or workshop and easing the process to apply for a loan. These should include whole Malaysia without focusing on city areas only. The relevant department such as SME Corporation Malaysia should also promote to women who live in rural areas and encourage them to start a small business by equipping them the knowledge about the process to startup own business. This could boost the female to be self-employed instead of waiting for employment opportunities. Female labour force participation could be increased.

5.4 Limitations of Study

There are some limitations faced by the author during the study is carried out. Firstly, the latest available full dataset for Labour Force Survey is on 2015 that caused the analysis is not updated. Therefore, the results might not be close enough to the current female labour force participation in Malaysia as only the overall percentage available in the report in the year 2018. Lastly, there is also a lack of focus on the

working sector and field of study by the respondents to examine the matching of skills in getting a job. Further analysis is not conducted because the objective is only to concentrate on the socio-economic and demographic variables and the other data is not available.

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