

## **Characterisation of Workers with Full-Time and Part-Time Work Schedules: The Labour Market in Penang, Malaysia**

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### **ABSTRACT**

An individual's decision regarding labour supply entails the choice to work or not to work, followed by the choice of employment status or work schedule, i.e., full-time versus part-time. This study aims to (i) compare the socio-demographic, household and work-related characteristics of full-time and part-time workers, (ii) determine if employment status is related to these characteristics and (iii) compare the incidence of full-time employment (i.e., the proportion of workers who work full-time) among sub-groups of workers. The study is based on a survey involving 527 workers. The convenience sampling method was used and the sample was stratified to reflect the ethnic and gender composition of Penang's population. The results show that the characteristics of full-time and part-time workers differ and that employment status is related to age, gender, marital status, education level, schooling status, household income, number of children, presence of adult dependents, occupation and the employment sector. The proportion of full-time workers is lower among individuals with the following characteristics: non-prime age, women, singles, less educated, still schooling, low household income, more children, no adult dependents, engaged in

sales/service or elementary occupations and the private sector. Policy implications are discussed in terms of encouraging full-time employment in these groups.

*Keywords:* Employment status, full-time employment, hours of work, part-time employment; work schedule

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### **INTRODUCTION**

Individuals in the working age group have to make decisions pertaining to work. The

first decision that a person has to make is whether to participate or not to participate in the labour market. Upon making the decision to participate in the labour market, the individual then has to determine the hours of work he/she wants to supply. The crucial question that workers face regarding their work schedule is whether to work full-time or part-time. The choice of full-time versus part-time work may be based on individual preference and needs. There is no universally accepted definition of full-time work and part-time work. According to the International Labour Organization (1994), as stated in *C175-Part-Time Work Convention 1994 (No. 175)*, a part-time worker is an 'employed person whose normal hours of work are less than those of comparable full-time workers'. For practical purposes, part-time work is usually defined in terms of hours of work. The threshold which distinguishes full-time and part-time workers varies from one country to another. It is based on a threshold of 30 hours per week in Finland, Canada and New Zealand, 35 hours in Australia, Austria, Iceland, Japan, Sweden and the United States, 36 hours in Hungary and Turkey and 37 hours in Norway (International Labour Office, 2004).

In the case of Malaysia, s. 60A of the *Employment Act 1955 (Msia)* specifies standard working time as 48 hours per week (i.e. a maximum of 8 hours of work per day and 6 working days per week) and no. 4(1) of the *Employment (Part-Time Employees) Regulations 2010 (Msia)* states that a part-

time employee is one whose average hours of work as agreed with the employer do not exceed 70% of the normal hours of work of a full-time employee employed in a similar capacity in the same enterprise. Hence, if a full-time employee works 48 hours per week, a part-time employee would be an employee whose average hours of work do not exceed 33.6 hours per week.

Part-time work serves as an entry point into the labour market for some workers (e.g., women and young people). It is also argued that one of the factors that underpins the choice of full-time versus part-time employment in recent times is the issue of work-life balance (Prithi & Vasumathi, 2018). This is because part-time work provides workers with an avenue to work shorter hours. It is also considered a more flexible working arrangement and gives workers more scope to combine labour market work with other activities.

However, part-time work has its drawbacks given that it usually entails the following problems: lower hourly wages than comparable full-time work, lower total earnings due to fewer hours of work (which may be compounded by lower hourly wages), fewer employee benefits (including social security benefits), limited opportunities for career advancement and training, work intensification (i.e. working part-time hours but carrying a full-time workload), irregular working hours and potential for reinforcing gender discrimination to the extent that part-time work mainly involves women who have

less favourable terms and conditions in the workplace (International Labour Office, 2004).

In this study, the research area is one of Malaysia's most developed states, i.e. Penang, which has a robust labour market especially in the manufacturing and service sectors with many full-time and part-time job opportunities. A better understanding of the characteristics of Penang's workforce that comprises part-time and full-time workers is necessary as Penang strives to transform itself into an International City and State that will pave the way for transforming Malaysia into a high-income nation. It is acknowledged that Penang is the heart of Malaysia's Northern Corridor and for this region to succeed, Penang must succeed. If the Northern Corridor can break through the middle-income trap, then Malaysia is a step closer to becoming a high-income nation (Kharas et al., 2010).

Based on the above discussion, this study seeks to address the following questions: (i) What are the differences in the socio-demographic, household and work-related characteristics of full-time and part-time workers in Penang? (ii) Is employment status related to these characteristics and (iii) What is the incidence of full-time employment for different sub-groups of workers? The results of this study will be used to compare the characteristics of workers with full-time and part-time work schedules and identify the factors that are associated with Penang workers' employment status. In addition, the incidence or rate of full-time employment (i.e., the percentage of individuals working

full-time) is computed for workers according to their attributes. The findings of this study provide a basis for recommending policies to facilitate full-time work (particularly for workers with a relatively low incidence of full-time employment) since full-time jobs offer advantages that are often lacking in part-time jobs.

## LITERATURE REVIEW

The choice of employment status is often related to the following factors: socio-demographic factors which include age, gender, marital status, education level and schooling status; household characteristics which encompass household income, number of children, presence of adult dependents in the household; and lastly work-related factors which comprise variables such as occupation and sector of employment.

Most studies take into account the relationship between employment status and key demographic variables like age, gender and marital status. Age is found to be a significant factor in the decision about employment status. Matysiak's (2005) study in Poland showed that part-time employment was mostly chosen by the young who were combining work with education and older persons in pre-retirement and retirement age groups. In a Malaysian study by Amin and Alam (2008), age was found to be positively related to the likelihood of choosing part-time employment. Another demographic variable is gender. Women have been found to have a greater tendency to work part-time. In Britain, Gregory and Connolly (2008)

indicated that although the number of men in part-time employment was increasing, 81% of part-time workers were women; it was also noted that 43% of women and only 9% of men in the workforce were part-time workers. Kitterod et al.'s (2013) study in Norway highlighted that about four out of ten employed women in the country worked reduced hours and the proportion is even higher among women with children. The third demographic factor that is related to the choice of employment status is marital status. Nomura and Gohchi's (2012) study in Japan found that individuals in full-time jobs were more likely to be single and childless. Dunn's (2018) study in the United States found that among women workers, the percentage of part-time workers was higher in the 'married' group (16.7%) than in the 'never married' group (11.4%); in other words, part-time employment is more prevalent among married women.

Employment status is also related to education, i.e. the likelihood of choosing full-time employment is positively related to education. Matysiak (2005) also showed that there was a strong effect of education on hours of work; i.e. persons with tertiary education were more likely to be full-time workers as compared to less-educated workers, especially those with primary education. This pattern was also noted by Manning and Petrongolo (2008) in the case of women workers in Britain, where it was found that full-time women workers were on average better educated than part-time women workers. Amin and Alam (2008) found that in Malaysia, years of education

and full-time employment were positively related. A recent study by Marotzke (2019) in two European countries, Germany and France, showed that the preference for part-time employment was lowest for women with high education. This implies that individuals with high education attainment tend to choose full-time work. Another education-related variable is one's schooling status. Due to the increasing cost of higher education, college students tend to work in order to pay for their education and living costs. Studies (e.g., Riggert et al., 2006; Yanbarisova, 2015) show that unlike part-time employment, full-time employment adversely affects the academic performance of students. Hence, there is a tendency to choose part-time work rather than full-time work among individuals who are still studying.

Household variables are also associated with an individual's employment status. One relevant variable is household income. The theory of labour supply suggests that household income and labour supply are negatively related due to the income effect; hence, individuals with high household income are more likely to work part-time, all else being equal. This relationship between household income and the choice of part-time versus full-time employment is supported by the findings of empirical studies. For instance, Buddelmeyer et al.'s (2005) study in eleven European countries as well as Amin and Alam's (2008) study in Malaysia showed that part-time workers were more likely to have higher household income, particularly in the case of women.

Another household variable that is related to the choice of employment status is the number of children in the household. Child care and domestic chores tend to increase with the number of children, thereby decreasing the hours allocated to market work. As compared to full-time work, part-time work enables individuals to achieve a better balance between domestic duties and labour market work. The relationship between the presence of children and the probability to work part-time is evident in Popova et al.'s (2003) study in the Latvian labour market as well as Gregory and Connolly's (2008) study in the UK.

A third household variable is the presence of adult dependents in the household which include a dependent spouse, adult children, parents and other adult household members who are unemployed or out of the labour force for various reasons. According to Bardasi and Gornick (2000), adult dependents may exert downward pressure on full-time employment (particularly among female workers) if adult dependents require care. In addition, the presence of adult dependents may cause work disincentives among workers if adult dependents in the household are awarded social benefit packages as in the case of welfare states.

Finally, work-related factors that pertain to employment status are occupation and economic sector. Part-time work usually involves workers who are engaged in occupations and sectors which require lower-level skills or qualifications. For instance, the study by Connolly and Gregory (2008) showed that those who worked part-

time are mostly women in smaller scale managerial positions (i.e. in service-oriented businesses such as restaurants, salons and shops). Manning and Petrongolo's (2008) study in the UK indicated that part-time women workers were more likely to work in personal service, sales or elementary occupations. The probability of working part-time also depends on the economic sector where a worker is employed. The findings of Popova et al. (2003) revealed that workers in sectors such as utilities, transport and logistics had the least probability of working part-time. On the other hand, part-time work was more prominent in the agricultural sector. In addition, the study also showed that public sector workers were less likely to work part-time than those in the private sector.

Many of the past studies on workers' choice of full-time versus part-time work schedules focus mainly on women and were conducted in developed nations. The focus on women is also true in the case of the only known Malaysian study by Amin and Alam (2008). The study was based on the data collected in the Second Malaysian Family Life Survey, carried out in Peninsular Malaysia in 1988-1989. The present study seeks to broaden the scope of investigation by extending the analysis to include men as well. Hence, this study seeks to profile full-time and part-time workers in the workforce which comprises both gender groups. Since this issue has been previously studied in Malaysia using a much older data set, this study will provide a more recent snapshot of the attributes of full-time and part-time

workers in Malaysia, specifically in the state of Penang. Finally, given the lack of studies in developing countries, this study will also provide insights on the issue of full-time versus part-time work schedules in the context of a developing country like Malaysia.

## METHOD

Primary data is used in this study. The survey data was collected using a structured self-administered questionnaire that was distributed to workers in Penang. The convenience sampling method was used and the sample was stratified to reflect the ethnic and gender composition of Penang's population in 2016 based on statistics reported by the Penang Institute (2018). A total of 527 respondents were surveyed comprising 207 (39.3%) Malays, 240 (45.5%) Chinese and 80 (15.2%) Indians/others. The ethnic distribution of respondents in the sample parallels the ethnic composition of Penang's population, which is made up of 40.9% Malays, 41.5% Chinese and 17.6% Indians and others. The sample consisted of 254 (48.2%) men and 273 (51.8%) women, which reflected the state's gender profile of 50.01% males and 49.99% females.

For the purpose of data analysis, the sample is divided into two main groups: (i) part-time workers, i.e., workers who do not work more than 70% of the standard workweek of 48 hours or in other words, do not work more than 33.6 hours per week and (ii) full-time workers, i.e., those who work more than 33.6 hours per week. This

is a descriptive study and the following is a discussion of the methods used to analyse the survey data. The characteristics of workers in this study are presented using cross-tabulations (also known as a bivariate table). Cross-tabulations show the distributions of two categorical variables simultaneously. In this study, the cross-tabulations show the distribution of workers by employment status or work schedule (that is, part-time or full-time work) versus various socio-demographic, household and work-related factors. The bivariate analysis used in this study adopts the Chi-square test of independence to ascertain whether there is an association between two categorical variables by comparing the observed pattern of responses in the cells to the patterns that would be expected if the variables were truly unrelated or independent of each other. By calculating the Chi-square statistic and comparing it against a critical value from the Chi-square distribution, it is possible to determine whether the observed cell counts are significantly different from the expected cell counts (Norusis, 1997).

Another statistic that is computed is the incidence of full-time work or also known as the full-time employment rate. In this study the threshold that separates part-time and full-time employment is 33.6 hours per week; hence, workers who work more than 33.6 hours per week are classified as full-time workers. The incidence of full-time employment shows the proportion or percentage of persons working full-time among all employed persons. The incidence of full-time employment is calculated for



workers in the different groups (based on the socio-demographic, household and work-related groupings that are used in this study).

## RESULTS

The sample consisted of 527 workers, of which 400 (76%) were working full-time while the remaining 127 (24%) workers were part-time workers. Table 1 provides a snapshot of the socio-demographic, household and work-related characteristics of workers with full-time and part-time work schedules and the incidence of full-time employment for each sub-group of workers.

The age of respondents ranged from 15 to 70 and the mean age was 32 years. The Chi-square test showed that age was significantly related to employment status. Table 1 shows that the majority of full-time workers were above the age of 24 while the majority of part-time workers were below the age of 24. The incidence of full-time work was lowest (44.9%) in the youngest group (15-24 years), where many of these workers might be still pursuing their education and hence opted for part-time work. The incidence of full-time work was also relatively low in the oldest group (55 and above), i.e. the pre-retirement age group, where older workers tended to choose part-time work as they prepared for retirement. In contrast, the prevalence of full-time work was high for prime-age workers (25-34 and 35-44 age bracket) who were at the crucial phase of building their careers; the incidence of full-time work in these age groups are 91.8% and 88.4%, respectively.

Another demographic variable is gender. The sample comprised 254 men (48.2%) and 273 (51.8%) women. Among the full-time workers, 221 (55.2%) were males and 179 (44.8%) were females. Conversely, the majority of part-time workers were females (74%) and only 26% were males. The data shows that the incidence of full-time work was higher for men, i.e. 87% of men versus 65.6% of women were full-time workers and the Chi-square test showed that gender is significantly related to employment status. This can be attributed to gender divisions in household work; women traditionally played a more dominant role in carrying out household duties and thus chose part-time work in many cases.

The respondents were divided into three marital status groups; i.e. 54.8% were single, 43.3% were married and 1.9% were divorced/widowed. About half the number of full-time workers were single and the other half belonged to the ever-married group (i.e., married or divorced/widowed). In the case of part-time workers, the large majority were singles (68.5%). The incidence of full-time work was lower for singles (69.9%) in comparison to married workers (83.8%). The low incidence of full-time work among singles can be due to the fact that some of them (30%) are still schooling. In addition, singles generally have lower financial responsibility in comparison to those who are married and the income from part-time work may suffice for their financial needs.

Table 1

*Distribution of workers by employment status and incidence of full-time work*

Variables	Categories	Chi-square statistics	Full-time work (%)	Part-time work (%)	Incidence of full-time work
Age	15-24	115.47***	15.5	59.8	44.9
	25-34		50.2	14.2	91.8
	35-44		21.0	8.7	88.4
	45-54		10.0	9.4	76.9
	55 and above		3.2	7.9	56.5
Gender	Male	33.07***	55.2	26.0	87.0
	Female		44.8	74.0	65.6
Marital status	Single	13.61***	50.5	68.5	69.9
	Married		47.8	29.1	83.8
	Divorced/ Widowed		1.8	2.4	70.0
Education	PMR or below	63.63***	8.3	22.8	53.2
	SPM		20.0	41.7	60.2
	STPM		20.0	11.0	85.1
	Bachelor Degree		43.0	22.8	85.6
	Master/PhD		8.7	1.6	94.6
Schooling status	Not studying	95.77***	90.8	52.0	84.6
	Studying		9.2	48.0	37.8
Household income	RM3000 and below	56.66***	40.5	78.7	61.8
	RM3001-5000		27.3	11.0	88.6
	RM5001-7000		14.5	3.9	92.1
	More than RM7000		17.8	6.3	89.9
No.children	0	12.82***	56.8	70.9	71.6
	1		12.0	3.1	92.3
	2		16.0	11.0	82.1
	3		10.8	9.4	78.2
	4 or more		4.5	5.5	72.0



Table 1 (Continued)

Variables	Categories	Chi-square statistics	Full-time work (%)	Part-time work (%)	Incidence of full-time work
Adult dependents	0	23.34***	62.0	85.0	69.7
	1 or more		38.0	15.0	88.9
Occupation	Manager	144.45***	8.5	0.8	97.1
	Professional		39.7	16.5	88.3
	Technician		11.0	0.8	97.8
	Administration		18.2	5.5	91.3
	Sales & Service		14.0	61.4	41.8
	Crafts		2.3	0.8	90.0
	Elementary		2.0	8.7	42.1
	Others		4.3	5.5	70.8
	Sector		Public	6.82***	13.8
Private		86.3	94.5		74.2

Source: Authors' own computation based on survey data.

Note: \*\*\* indicate the Chi-square statistic is significant at 1 percent for all the variables.

Table 1 includes two factors related to education, i.e. education level and current schooling status. Both factors are significantly related to the employment status of workers. The proportion of workers with a low education level (PMR, i.e. lower secondary education, or below) was greater among part-time workers than full-time workers (i.e., 22.8% and 8.3%, respectively). In contrast, the proportion of workers with a high level of education (Bachelor, Master or PhD degree) was higher among full-time workers than part-time workers (i.e. 51.7% and 24.4%, respectively). The incidence of full-time work was relatively low (53.2%) for workers with a low education level (PMR or below). This is possibly because most jobs for less educated workers are low-paid, contingent

jobs which are typically part-time. In contrast, full-time jobs generally require higher levels of education. The incidence of full-time work was higher (exceeds 85%) for workers with STPM (A-level) education and above. Lucrative jobs abound in Penang's rapidly developed economy and the better educated groups prefer to work more hours (i.e. full-time) to get the highest possible remuneration in these jobs.

The second education variable is current schooling status. Less than 10% of full-time workers were pursuing their education while nearly half the number of part-time workers were studying. It is noted that the incidence of full-time work is far lower (37.8%) for workers who were currently studying vis-à-vis those who were not studying (84.6%), given that educational pursuit

was time-intensive and in many cases, students preferred part-time work in order to complete their education successfully.

The next group of variables is household variables which include household income, number of children and presence of adult dependents. Household income levels range from below RM3000 to above RM7000. The proportion of workers with a relatively low monthly household income (RM3000 and below) was 40.5% among full-time workers and nearly two times higher (78.7%) for part-time workers. The prevalence of full-time work is notably the lowest (61.8%) among workers with the lowest level of household income (below RM3000). The prevalence of full-time work was greater (close to 90%) among workers with household income levels exceeding RM3000. This finding is counter intuitive. It is contrary to the expectation of an inverse relationship between household income and the prevalence of full-time work, especially in the case of secondary earners (e.g. women) who tend to have a preference for part-time work due to other commitments. However, it is plausible that the relationship between household income and employment status shown in Table 1 is an indication that the scenario in Penang's rapidly developing economy may be similar to the situation in developed countries such as the UK, at least as far as female workers are concerned, where full-time employment is likely to be adopted by women with higher household income due to their status as equal earners/main earners in the family

and the availability of resources to support a full-time working lifestyle (Kanji, 2010).

Another household variable is number of children. Nearly 57% of full-time workers and 71% of part-time workers did not have children in the household. These figures correspond to the proportion of singles among workers in each employment status group. Among workers with children, the incidence of full-time employment was inversely related with the number of children. This is because an increase in the number of children increases child care responsibilities, which reduces the time available for full-time employment, especially in the case of women who are usually the main caregivers. Aside from the number of children, another household factor is the presence of adult dependents in the family, which includes those who are either unemployed or outside the labour market for various reasons. The majority of both full-time and part-time workers do not have adult dependents and the incidence of full-time employment is about 70% for workers without adult dependents. In contrast, the incidence of full-time work is higher (nearly 89%) for workers with adult dependents in the household. Unlike the situation in developed countries, the social benefits for adult dependents in Malaysia are limited and hence it does not result in work disincentives (via a negative income effect) for household members who are working full-time. Furthermore, it is argued that the presence of adult dependents do not necessarily impinge on full-time

employment, given that adult dependents (especially grandparents) may assist in child care duties that enable workers to work full-time.

The last category of factors is work-related factors, which includes occupation and sector of employment. The highest percentage of full-time workers are in professional jobs (39.7%) whilst the highest percentage of part-time workers are engaged occupations related to sales and service. The incidence of full-time work is the lowest (approximately 40%) among sales and service workers as well as elementary workers. In contrast, the incidence of full-time employment is more than two times higher in other occupations. Finally, the majority of both full-time and part-time workers are employed by the private sector. The incidence of full-time work is lower among private sector workers; the figure is 74% for private sector workers and 89% for public sector workers. This is because most public sector jobs are full-time jobs and part-time options are limited in this sector.

To conclude, the results of the data analysis are broadly consistent with the findings of previous studies in the literature. However, it is noted that the findings of this study differ from earlier studies with respect to the relationship between employment status and household income. Earlier studies (e.g., Amin & Alam, 2008; Buddelmeyer et al., 2005) show that part-time workers are more likely to have higher household income. However, this study shows that full-time employment is positively related to household income. This may be because

full-time employment is chosen by Penang workers (including female workers) with higher household income due to the access to resources to support a full-time working lifestyle for both gender groups. Another finding in this study that differs from earlier studies is with regard to the relationship between employment status and the presence of adult dependents. Bardasi and Gornick (2000) suggested that adult dependents had a negative influence on full-time employment since they might require care and because the social benefit packages that were given to them reduced the work incentives of other family members. However, the present study shows that the incidence of full-time employment is higher for workers with adult dependents. This may be because the presence of adult dependents in the households allows others in the family to work full-time since non-working adult dependents can play the role of caregiver.

## DISCUSSION

Based on the results presented in Table 1, it is noted that the incidence of full-time employment tends to be lower for workers with the following characteristics: non-prime-age workers, women, singles, workers with lower education, currently studying, household income below RM3000, having more children, no adult dependents in the household, engaged in sales/service or elementary occupations and in the private sector. The findings are used to discuss policy implications. Since full-time work may be regarded as being better than part-time work (given the disadvantages of part-

time work noted earlier), the following is a discussion of viable policies or strategies to promote full-time employment for groups with a relatively low incidence of full-time employment.

The results show that the incidence of full-time work is lower among workers at the two ends of the age spectrum. In the case of workers in the oldest age group (55 years and above), the relatively low incidence of full-time work may be partly attributed to age discrimination where older workers may be sidelined by employers and given part-time positions whilst younger workers are preferred for full-time jobs because they are considered to be more productive, trainable and adaptable. Unlike developed countries such as the United States, there are no laws as yet in Malaysia that prohibit age discrimination *per se* in the work place. The time has come to introduce legislation that prohibits age discrimination in Malaysia to prevent the underutilisation of talents as we move in the direction of becoming an ageing population. In addition, older workers themselves may prefer part-time work due to health problems and/or lack of financial motivation to work full-time if they have accumulated sufficient savings and assets over the years. However, since older workers have a wealth of work experience and knowledge, it would be beneficial to offer senior workers full-time positions that suit their needs in order to encourage them to work full-time, thus enabling them to maximise their contribution to the organisation. Older workers should also be given the opportunity to participate

in training programmes to upgrade their skills and keep abreast of changes in the workplace.

The data shows a gender gap in the incidence of full-time employment, i.e. women have a lower incidence of full-time employment than men. The Malaysian government has hitherto outlined policies to encourage women to work. This includes strategies to attract women who had stopped working to return to the labour force via the Career Comeback programme that provides employment re-entry opportunities and also giving a one-year tax break for eligible women returning to work (Khazanah Research Institute, 2019). Policies to encourage women to work full-time include the provision of child care and flexible work arrangements (including work-from-home option) as outlined in the current Eleventh Malaysia Plan, 2016-2020 (Economic Planning Unit, 2015). In addition to the above, other gender-friendly labour policies should be implemented to ensure that the labour market conditions are more conducive for women to work full-time. Among the measures that are proposed to attract women to work full-time include implementing the principle of pay equity which ensures that men and women receive equal pay when they perform work that involves comparable skills or that is of comparable worth to the employer as well as dismantling barriers that prevent the career advancement of women. Encouraging women to work full-time allows employers to tap the potential of women to the fullest.

The results also show that the incidence of full-time work is inversely related to the number of children in the household. The availability of nurseries and day care centres would enable workers (especially women) to work full-time. Ideally, organisations should provide child care facilities in the work place or in a neighbouring area so that parents can easily drop off and pick up their children at these centres. Employers who are unable to provide this service should be encouraged to include child care allowances as part of their employee benefits package so that workers with more children can also afford private child care services, thus enabling them to work full-time. The Malaysian government supports these initiatives by implementing fiscal measures in terms of giving tax incentives to employers who provide child care centres or pay child care allowances for the benefit of employees (Inland Revenue Board of Malaysia, 2016). Other policies that have been put in place in Malaysia to facilitate child care include the following: providing formal care services by the public sector, encouraging the private sector to conduct corporate social responsibility programmes which include sponsoring the establishment of care centers in partnership with NGOs and conducting training or developing modules for training care providers and assessing the quality of care centres (Khazanah Research Institute, 2019). Flexi hours would be another solution whereby full-time workers are given some flexibility in choosing the time they start and finish work. Such a scheme would allow one or both parents

to choose their work time schedules and thereby optimise the time they allocate for child care.

Finally, the results indicate that employment status is related to education variables, i.e. level of education and current schooling status. With regard to the first education variable, i.e. education level, it is noted that the incidence of full-time employment is lower among workers with low education levels. However, the rising cost of living and higher education makes it increasingly difficult for lower income families to finance the higher education of their children. The failure to pave the way for poorer students to attain higher education suggests that the relatively low levels of education that these less fortunate students achieve (due to financial reasons) may restrict their job prospects to lower paid jobs (such as elementary jobs as well as sales/service jobs) that are often part-time jobs. Hence, the incidence of full-time employment can be enhanced for workers with lower education levels by giving them the opportunity to pursue their higher education (e.g., by providing loans or scholarships) or undergo skills training that will improve their employability in better paid full-time jobs.

Employment status is also significantly related to schooling status, i.e. the incidence of working full-time is lower among workers who are still schooling. An individual who is still schooling generally anticipates schedule conflicts at the workplace and the educational institution and hence opt for part-time work to avoid or minimise

this problem. To enable more students to work full-time (particularly in the case of workers who need a full-time job to support their financially strapped family), the flexibility provided by the employer and the educational institution is vital. For instance, employers can allow shifts in work schedule or days/time off from work to accommodate the educational needs of workers who are pursuing their education.

## CONCLUSION

This study contrasts full-time and part-time workers in Penang. The discussion in this article revolves around the issue of (i) differences in the characteristics of full-time and part-time workers, (ii) the relationship between workers' employment status (full-time versus part-time) and their socio-demographic, household as well as work-related characteristics and (iii) the incidence of full-time employment for different sub-groups of workers.

The results of the bivariate analysis are based on cross tabulations. The majority of full-time workers were above 24 years old and conversely the majority of part-time workers were below 24 years old. The large majority of part-time workers were females and single. Nearly half the number of full-time workers had higher education while about half the number of part-time workers are pursuing their education. The majority of part-time workers belonged to low-income households (below RM3000 per month) while the majority of full-time workers belonged to relatively higher income households. About 57% of full-time workers

had no children; the corresponding figure was 71% for part-time workers. Most full-time and part-time workers did not have adult dependents in the household. The majority of full-time workers were employed in either managerial, professionals, technicians or administrative occupations. On the other hand, the majority of part-time workers were in sales/service and elementary occupations. Most workers in both employment status groups were in the private sector.

The Chi-square test results show that employment status (full-time or part-time) is related to factors such as age, gender, marital status, education level, schooling status, household income, number of children, presence of adult dependents, occupation and employment sector. A comparison of the incidence of full-time work shows that the proportion of full-time workers is lower among individuals with the following characteristics: non-prime age, women, single, less educated, still schooling, low household income, more children, no adult dependents, engaged in sales/service or elementary occupations and in the private sector.

The discussion on policy implications is based on the premise that full-time employment generally offers more advantages to workers and hence the need to find ways to facilitate full-employment for workers. Malaysia has addressed this problem to some extent, particularly in the case of female workers. However, there is still room for enhancing full-time employment among female workers, those with child care responsibilities, older



workers, individuals with low education level and those who are pursuing their education. The underutilisation of workers that arises from part-time employment translates into lost opportunity to boost the national economy and mitigate the impact of an impending ageing population. To conclude, it is in the interest of individual workers and the nation as a whole to promote full-time employment.

Finally, it is noted that some workers still prefer part-time work even when steps are taken to reduce the barriers of engaging in full-time employment. For such workers, it is necessary to ensure that they are treated fairly by employers. Further research is needed in this area to establish whether part-time workers are treated fairly or less favourably than full-time workers in the Malaysian labour market.

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## REFERENCES

- Amin, S., & Alam, I. (2008). Women's employment decision in Malaysia: Does religion matter? *Journal of Socio-Economics*, 37(6), 2368-2379.
- Bardasi, E., & Gornick, J. C. (2000). *Women and part-time employment: Worker's 'choices' and wage penalties in five industrialized countries* (LIS Working Paper Series, No. 223). Retrieved April 28, 2019, from <https://www.econstor.eu/bitstream/10419/160895/1/lis-wps-223.pdf>
- Buddelmeyer, H., Mourre, G., & Ward-Warmedinger, M. (2005). *Part-time work in EU countries: Labour market mobility, entry and exit* (European Central Bank Working Paper Series No. 460/ March 2005). Retrieved April 28, 2019, from <https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp460.pdf?c90e982d328ec44a1f7b658160be6104>
- Connolly, S., & Gregory, M. (2008). Women's part-time work and occupational change in Britain 1991-2001. *Economic Journal*, 118(526), F52-F76.
- Dunn, M. (2018). Who chooses part-time work and why? *Monthly Labor Review*. <https://doi.org/10.21916/mlr.2018.8>
- Economic Planning Unit. (2015). *Eleventh Malaysia Plan, 2016-2020*. Putrajaya, Malaysia: Percetakan Nasional Malaysia Berhad.
- Employment Act 1955* (as at 30 Apr 2012) s. 60A (Msia.). Retrieved April 28, 2019, from <http://www.agc.gov.my/ageportal/uploads/files/Publications/LOM/EN/Act%20265%20-%20Employment%20Act%201955.pdf>
- Employment (Part-Time Employees) Regulations 2010*. no. 4(1) (Msia.). Retrieved April 28, 2019, from <https://www.ilo.org/dyn/travail/docs/1527/Employment%20-%20Part-time%20Employees%20-%20Regulations%202010%20-%20www.pesaraonline.net.pdf>
- Gregory, M., & Connolly, S. (2008). The price of reconciliation: Part-time work, families and women's satisfaction. *Economic Journal*, 118(526), F1-F7.
- Inland Revenue Board of Malaysia. (2016). *Tax incentives for employers who provide child care centres* (Public ruling no.5/2016). Retrieved

- April 28, 2019, from [http://lampiran1.hasil.gov.my/pdf/pdfam/PR\\_5\\_2016.pdf](http://lampiran1.hasil.gov.my/pdf/pdfam/PR_5_2016.pdf)
- International Labour Office. (2004). *Conditions of work and employment programme*. Retrieved April 28, 2019, from [https://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/--travail/documents/publication/wcms\\_170717.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/--travail/documents/publication/wcms_170717.pdf)
- International Labour Organization. (1994). *C175-Part-Time Work Convention 1994 (No. 175)*. Retrieved April 28, 2019, from [https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0:0::NO::P12100\\_ILO\\_CODE:C175](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0:0::NO::P12100_ILO_CODE:C175)
- Kanji, S. (2010). What keeps mothers in full-time employment? *European Sociological Review*, 27(4), 509-525.
- Kharas, H., Zeufack, A., & Majeed, H. (2010). *Cities, people & the economy: A study on positioning Penang*. Kuala Lumpur, Malaysia: Khazanah Nasional Berhad.
- Khazanah Research Institute. (2019). *Time to care: Gender inequality, unpaid care work and time use survey*. Kuala Lumpur, Malaysia: Author.
- Kitterod, R. H., Ronsen, M., & Seierstad, A. (2013). Mobilising female labour market reserves: What promotes women's transitions between part-time and full-time work? *Acta Sociologica*, 56(2), 155-171.
- Manning, A., & Petrongolo, B. (2008). The part-time pay penalty for women in Britain. *Economic Journal*, 118(526), F28-F51.
- Marotzke, P. (2019). *The rise of part-time work: A German-French comparison* (Deutsche Bundesbank Discussion Paper No. 20/2019). Retrieved January 20, 2020, from <https://www.bundesbank.de/resource/blob/798592/9560b156f7f70e30b414dc619a3c573f/mL/2019-06-11-dkp-20-data.pdf>
- Matysiak, A. (2005, April). *Part-time employment in Poland – family friendly employment form or a mere alternative for the low-skilled?* Paper presented at LoWER Annual Conference 2005, Mannheim, Germany. Retrieved April 28, 2019, from <http://zinc.zew.de/pub/zew-docs/div/lower/Matysiak.pdf>
- Nomura, K., & Gohchi, K. (2012). Impact of gender-based career obstacles on working status of women physicians in Japan. *Social Science and Medicine*, 75(9), 1612-1616.
- Norusis, M. J. (1997). *SPSS 7.5 Guide to data analysis*. New Jersey, USA: Prentice Hall.
- Penang Institute. (2018). *Penang statistics Quarter 3, 2018*. Retrieved April 28, 2019, from [https://penanginstitute.org/wpcontent/uploads/jml/files/quarterly\\_penang\\_statistics/2018/PQS-Q32018.pdf](https://penanginstitute.org/wpcontent/uploads/jml/files/quarterly_penang_statistics/2018/PQS-Q32018.pdf)
- Popova, J., Rastrigina, O., & Trapeznikova, I. (2003). Part-time employment and underemployment in the Latvian labour market. *Baltic Journal of Economics*, 3(2), 42-58.
- Prithi, S., & Vasumathi, A. (2018). The influence of demographic profile on work life balance of women employees in tannery industry-an empirical study. *Pertanika Journal of Social Sciences & Humanities*, 26(1), 259-284.
- Riggert, S. C., Boyle, M., Petrosko, J. M., Ash, D., & Rude-Parkins, C. (2006). Student employment and higher education: Empiricism and contradiction. *Review of Education Research*, 76(1), 63-92.
- Yanbarisova, D. M. (2015). The effects of student employment on academic performance in Tatarstan higher education institutions. *Russian Education and Society*, 57(6), 459-482.