# Is Malaysia's Pension Scheme Sufficient to Secure the Quality of Life for the Elderly?

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## 1 Introduction

The present pension system has created concerns among employers, academics, social development scholar and policymakers in Malaysia and other countries (Ju, Han, Lee, Lee, Choi, Hyun, & Park, 2017). In 2017, the population in Malaysia was estimated at 32 million. The portion of that population aged 0-14 years in 2017 dropped to 24.1% from 24.5% in 2016 and the number has increased among those aged 15-64 years from 69.5% in 2016 to 69.7% in 2017 (Department of Statistics Malaysia, 2017). Currently, the elderly population constitute 8.2% (2.4 million) of the total population, and this figure is expected to increase to 15% by the year 2030 (Yahaya, Abdullah, Momtaz, & Hamid, 2010; Wan-Ibrahim & Zainab, 2014; Onunkwor et al., 2016). This indicates that the elderly population will present a significant challenge for Malaysia (Tolos, 2012).

The current pension provision and its ability to provide income and financial sustainability for a significant number of the elderly in Malaysia is an issue of concern (Onunkwor, Al-Dubai, George, Arokiasamy, Yadav, Barua, & Shuaibu, 2016). Malaysia has several social protection systems including the public pension scheme offered only to civil servants, the Employees Provident Fund (EPF) for the private sector, Social Security Organisation (SOCSO) and the Armed Forces Superannuation Fund (Tolos, 2012). It is predicted that the pension of civil servants, EPF and old age assistance will not be sufficient to fulfil the additional demands of the elderly. The issue is exacerbated by longer life expectancy and the increasing cost of securing a comfortable living in Malaysia (Barr & Diamond, 2009; Yusuf, 2012; Chen, Hicks, & While, 2014; Mohd, Mansor, Awang, & Ahmad, 2015; Awang & Ahmad, 2015; Onunkwor et al., 2016). It is assumed that the existing pension system covers only a small portion (around 11%) of the total elderly population in Malaysia (Park & Estrada, 2012; Tey, Siraj, Kamaruzzaman, Chin, Tan, Sinnappan, & Müller, 2016). This trend will further increase the risk of poverty (Doling & Omar, 2012) among the elderly.

Despite efforts by the Malaysian government to achieve zero poverty, the issue of poverty among the elderly is a relatively new concern. Additionally, the majority of Malaysians do not have social pension (also known as a non-contributory pension) and social protection in old age (Hatta & Ali, 2013; Ong & Hamid, 2010; Mohd et al., 2015). In Malaysia, the compulsory retirement age is 60 years. However, many older adults continue working (paid

work, contract job) (Ng & Hamid, 2013) after retirement to supplement their income (Masud et al., 2006b). This trend will create tensions in the job market that would affect the young generations seeking to enter the job market adversely.

Another challenge faced by older Malaysians is the inadequacy of their savings upon retirement. Generally, elderly Malaysians have limited savings, especially the 40% of households with a very low average monthly household income of RM 1,440 (US$ 351.21) (Samad & Mansor, 2013). In Malaysia, 22.7% of the households headed by the elderly (aged 65 years and over) had the highest incidence of poverty (Hatta & Ali, 2013; Sharifah et al., 2010). Therefore, an effective and vigorous public and private pension system for the "target population" is an important tool for adequate old-age income (Park & Estrada, 2012).

In the global context, the social pension system contributes significantly to the financial security of the pensioners and has a positive impact on social development. However, the pension in developing countries is inadequate for large numbers of pensioners to secure them against poverty (Barrientos, 2009). The current global economic downturn has affected the economies of many developing countries like Malaysia and has affected the pension system. For example, the government of Malaysia reduced the contribution rates for retirement savings for employees in 2009 to stimulate the demand for consumption and labour (Yusuf, 2012). A large number of retirees are at the risk of poverty and experienced a reduction in income due to limited income sources and dependents (Vaghefi, Kari, & Talib, 2016; Tolos, 2012). Therefore, the government of Malaysia must focus attention to revising the public pension system in order to improve the effectiveness of the pension and maintain the QOL of pensioners (Yusuf, 2012). Hence, this study seeks to examine whether the public pension system provides sufficient value to ensure a standard QOL in later life in Malaysia.

## 2 Literature Review: Concepts, Theories and Research

### 2.1 Quality of life (QOL) of the elderly

The World Health Organisation (WHO) defined QOL as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns (The WHOQOL Group, 1998). The WHOQOL Group emphasises "the importance to know how satisfied or bothered people are by important aspects of their life, and this interpretation will be a highly individual matter" (Skevington et al., 2004, p. 299). The QOL construct has a complex composition, so it is perhaps not surprising that there is neither an agreed definition nor a standard form of measurement (Cummins, 1997; Marans, 2015). On the other hand, quantifying QOL faces numerous debates, for example: What aspects should be measured and what is the relative weight of different aspects? (Veenhoven, 2007).The WHOQOL-BREF is currently scored in four domains: physical health, psychological, social relation and environment (Skevington et al., 2004). Nevertheless, the QOL includes good physical functioning, relationships with others, psychological well-being, health, and social activity as critical aspects of well-being for the elderly (Alavi et al., 2011).

The QOL comprises eight domains including interpersonal relation, material well-being, social inclusion, physical well-being, personal development, emotional well-being, self-determination and rights (Schalock, 2004). It is a vast concept that covers a person's psychological state, physical health, social relationships, level of independence and relationships with salient features of his or her atmosphere (Bodur & Cingil, 2009). Employment, housing, income, social security, marital status, education, and other living and

environmental circumstances affected the QOL (Smith, Sim, Scharf, & Phillipson, 2004). Many organisations and countries have defined QOL differently, resulting in no agreed definition or standard measurement. These attempts have used different characteristics to measure QOL (Gou, Xie, Lu, & Khoshbakh, 2018). For example, Zhao, Heath and Forgue (2005) measured the QOL by income, good health; healthcare facilities, housing, psychological variables such as happiness and satisfaction with life and work.

This study used the QOL scale developed by Zhao, Heath and Forgue (2005) and the QOL defined by the WHO, which is consistent with Western society. In Asia, the QOL Index was developed by the Faculty of Social Science, The Chinese University of Hong Kong. This index covers a wide range of life domains, which consists of 23 indicators that are grouped into five sub-indices: Health, Social, Culture and Leisure, Economic and Environmental (Chan, Andy Kwan, & Daniel Shek, 2005). The indicators are selected according to the coverage, measurability, representativeness, and importance to the QOL in Hong Kong. A higher score indicates better QOL (Gou et al., 2018).

In Malaysia, QOL was defined as the progress achieved when a society shifts from an unfortunate state of life to an improved condition. This progress is not merely referring to economic growth but also social, cultural, political, environmental as well as psychological development (Bakar, Osman, Bachok, & Ibrahim, 2016). The Malaysian Quality of Life (MQOL) (1999) stated that a QOL comprises the personal achievements, a healthy lifestyle, access and freedom to pursue knowledge, and a standard of living, "which surpasses the fulfilment of basic needs of individuals and their psychological needs, to achieve a level of social well-being compatible with the nation's aspirations" (Harith & Noon, 2018, p. 4). There are 38 indicators representing ten components of QOL in Malaysia QOL Index (MQLI) 1999 (Bakar et al., 2016). The components are income and distribution, working life, transport and communications, health, education, housing, environment, family life, social participation and public safety (Bakar et al., 2016). However, the appropriateness and consistency of the indicators and the components of MQLI are questionable, and due to data constraint, the measure of MQLI at the state level is not fully applicable (Bakar et al., 2016, p.133). Measuring QOL is essential to understand people's overall satisfaction with their existence. "It involves measurement of quantified indicators and 'materialistic' aspects such as income, expenses, assets and the ownership of goods and also 'nonmaterialistic' aspects such as health, social inclusion, education and others" (Idris et al., 2016, p.2).

## 2.2  Pension scheme in Malaysia

In general, the pension scheme is an arrangement by which an employer and, usually an employee, pay into a fund that is invested in providing the employee with a pension on retirement. The Public Service Pension Scheme established under the Government Pension Ordinance of 1951 (revised Pension Act, 1980) provides pensions to civil servants. A permanent government officer is eligible for a non-contributory government pension that s/he is confirmed and has completed no less than three years of recognised service. The scheme covers retirement benefits for officials in the federal, state and local public service; employees of state enterprises, Judges and members of Parliament. However, only pensionable officials qualify for benefits under the scheme, while temporary and part-time officials were excluded. The maximum monthly retirement pension available under the scheme is 50% of one's final salary. Pensions for the federal civil servants are paid out of the federal government general revenue. State enterprises, statutory authorities and local governments contribute 17.5% of the

employees' monthly salary in respect of their employees; the employees themselves do not contribute anything (Doraisami, 2005).

The EPF, Malaysia, also provides employment, injury and invalidity benefits under the Employees' Social Security Act 1969, called SOCSO. It consists of two separate schemes; the Employment Injury Scheme (EIS) which was implemented in 1972, and the Invalidity Pension Scheme (IPS) introduced in 1974. All employers employing one or more employees are covered under the Act. The Act, however, applies only to those employees earning less than RM2,000 (US$487.80) per month. Once an employee is covered, then cover continues to be valid regardless of income. The main groups exempted are domestic servants, casual workers, military and police personnel. The contribution rate for the EIS is approximately 1.25% of wages and is wholly paid by the employer. For the IPS, the rate of contribution is 1.0% of wages shared equally between the employer and the employee (Doraisami, 2005).

The QOL depends on income, housing and institutionalisation, family and community and health status of this elderly in Malaysia (Ambigga, Ramli, Suthahar, Tauhid, Clearihan, & Browning, 2011). Moreover, the emphasis on the pension scheme could be justified by fulfilling the socio-economic well-being, including improving the health status of the elderly in Malaysia (HelpAge International, 2006; Jamison, 2009). Retirement earnings strategies must seek to decrease poverty among the elderly by securing economic well-being in old age (Yusuf, 2012). Otherwise, pension assistances risk being inadequate to provide these groups with an adequate income to live their life in old age. The Civil Service Pension Scheme only covers workers in public sectors, or around 11% of the elderly (Yusuf, 2012; Tey et al., 2016). The pensioner's health status and standard of living depend on good financial conditions (Yusuf, 2012). Adequate pension assistance decreases the mental anxiety for the elderly and improves their health and QOL (Tey et al., 2016).

## 3 Methodology

### 3.1 Research approach and research method
This study adopted a quantitative approach via a social survey. This approach was used to gather data from a representative sample that represents the broader population. It deals with figures and proves relationships between independent and dependent variables (Sekaran, 2006). It collects and analyses quantitative data to gain a better understanding of the research problem (Creswell, 2005).

### 3.2 Sampling and sample size
A list of public pensioners was collected from the Malaysian Government Pensioners Association Penang. A 95% confidence level and 7% level of precision was used to calculate sample sizes (Yamane, 1967), and the minimum sample size for this study was 200 public pensioners. This size of the sample was regarded as representative of the population.

$$\frac{N}{1 + N(e)^2} = \frac{9,000}{1 + 9,000 * (0.07)^2}$$

$$n = 200 \text{ sample}$$

A sample of 200 was drawn from a list of 9,000 public pensioners who are currently receiving pensions from the state of Penang (Malaysian Government Pensioners Association Penang, 2017). The samples were selected from members of the Malaysian Government Pensioners

Association, Penang. The list detailed the pensioners' names and addresses, which helped the researcher find the respondents and conduct interviews. The respondents were aged 60 years, or older and random sampling was used for sample size selection, in which the primary criterion for selection was that the respondents should be public pensioners.

Table 1 presents the demographic and socio-economic profile of the respondents. Data showed that 58% of the pensioners were aged 60-65 years, 25% 66-70 years, 9% 71-75 years, 7% 76-80 years and the remaining 2% 80 years and above. In terms of gender, 73% were male, and 28% female. Eighty-four percent of the respondents were married, 9% single, 7% widow and 1% divorced. The highest 60% of the respondents had secondary school education, 18% diploma, 13% primary, 7% degree and the remaining 4% had a master's degree. According to ethnicity, 66% were Malays, 24% Indian and 10% Chinese. This study found that the monthly income (before retirement) of the 40% of the respondents had incomes between RM1000-3000 (US$241.14-US$731.70), 27% between RM3001-5000(US$731.95-US$1219.51), 27% less than RM1000 (US$243.90), and the remaining 5% between RM5001-7000 (US$1219.75- US$1707.31). On the other hand, after retirement, half of the population (50%) had incomes of RM1000-3000 (US$241.14-US$731.70), 40% less than RM1000 (US$243.90) and the remaining 9% RM3001-5000 (US$731- US$1219.51). The majority (45.5%) of the elderly received RM1000-3000 (US$241.14-US$731.70), 45% less than RM1000 (US$243.90), and the remaining 10% between RM 3001-5000 (US$731.95-US$1219.51). In terms of additional income sources, 33% of the elderly received financial assistance from their adult children, 31% had no additional income sources. Other additional sources include 19% savings, 8% paid work, 5% rental (house, land and shop) and 5% business.

Table 1. Percentage distribution of selected demographic, socio-economic and health status of the study population

| Variables | N (200) | Percent (100) | Variables | N (200) | Percent (100) |
|---|---|---|---|---|---|
| *Age of the respondents* | | | *Monthly income before retirement (RM)* | | |
| 60-65 Years | 115 | 57.5 | | | |
| 66-70 Years | 50 | 25.0 | Less than 1000 | 53 | 26.5 |
| 71-75 Years | 18 | 09.0 | 1000-3000 | 80 | 40.0 |
| 76-80 Years | 13 | 06.5 | 3001-5000 | 54 | 27.0 |
| More than 80 Years | 04 | 02.0 | 5001-7000 | 13 | 6.5 |
| | | | *Monthly income after retirement (RM)* | | |
| *Gender of the respondents* | | | | | |
| Male | 145 | 72.5 | Less than 1000 | 79 | 39.5 |
| Female | 55 | 27.5 | 1000-3000 | 100 | 50.0 |
| Marital status | | | 3001-5000 | 21 | 10.5 |
| Married | 168 | 84.0 | *Monthly pension (RM)* | | |
| Single | 17 | 08.5 | Less than 1000 | 89 | 44.5 |
| Divorced | 02 | 01.0 | 1000-3000 | 91 | 45.5 |
| Widowed | 13 | 06.5 | 3001-5000 | 20 | 10.0 |
| | | | *Additional income sources* | | |
| *Education qualification* | | | | | |
| Primary | 26 | 13.0 | Business | 10 | 5.0 |
| Secondary | 119 | 59.5 | Rent (land, house, shop) | 09 | 4.5 |
| Diploma | 35 | 17.5 | Contribution from | | |
| Degree | 13 | 06.5 | children | 66 | 33.0 |
| Masters | 07 | 03.5 | Savings | 38 | 19.0 |

| *Ethnicity of the respondents* | | | Paid work | 16 | 8.0 |
|---|---|---|---|---|---|
| Malay | 132 | 66.0 | No income sources | 61 | 30.5 |
| Indian | 48 | 24.0 | | | |
| Chinese | 20 | 10.0 | | | |
| *Profession before retirement* | | | | | |
| Managerial | 37 | 18.5 | | | |
| Administrative | 21 | 10.5 | | | |
| Clerical | 34 | 17.0 | | | |
| Teaching | 31 | 15.5 | | | |
| Others | 77 | 38.5 | | | |

### 3.3 Data collection method(s) and data collection instruments

The quantitative data were collected through a semi-structured face-to-face questionnaire. This study was conducted from January 2017 to April 2017. The questions were administered in Malay and English languages by a trained native speaker of each language. The first part included questions on demographic and socio-economic variables such as age, gender, ethnicity, religion, household income, expenditure, housing facilities, self-rated health status, medical facilities, living cost, home, type of accommodation, transportation, children`s education, the perception of pensions scheme and recommendations to improve the QOL among pensioners in Malaysia. In the second part, to determine the QOL, the study modified the QOL scale developed by Zhao, Heath and Forgue (2005) and the QOL scale which is consistent with the WHO QOL Index used in Western countries. To identify the QOL, nine (9) items were used: Adequate benefit from a pension, satisfied with present financial condition, the ability for savings money, the ability for finance on children education, satisfied with current living places, and assets is enough to manage an emergency. Each item is ranked on a 5-point Likert scale (totally disagree-1, disagree-2, neutral-3, agree-4 and totally agree-5). However, for two (2) items (bargaining during shopping to reduce prices and difficulty facing for spending) reverse scoring was employed due to negative items (totally agree-1, agree-2, neutral-3, disagree-4 and totally disagree-5). The study calculated satisfaction with the pension (adequate benefit from pension+ satisfied with present financial condition+ ability for savings money+ ability for finance on children education+ satisfied with current living places+ assets is enough to meet emergency+ good health status+ bargaining during shopping to reduce prices+ difficulty facing for spending= satisfaction with pension). The level of satisfaction for QOL is measured by a score of 33 representing low satisfaction, 34-66 medium satisfaction and 67-100 high satisfaction. Higher scores indicate higher QOL. The convergent validity and reliability were satisfactory. The Cronbach's α coefficient of overall QOL and most of its dimensions exceeded 0.71. The Cronbach's a coefficient of the QOL in this study was 0.776.

### 3.4 Data analysis

All data were analysed using SPSS (version 24.0). Descriptive statistics were employed to identify participant selected demographic characteristics, socio-economic characteristics and health status of the study population. A statistical analysis of custom table was used to get the mean score of QOL, and Multinomial Logistic Regression (MLR) was used to identify the relationship between the income of pensioners and QOL of the elderly in Malaysia. The leading advantage of multinomial regression analysis is the ability to estimate the predictive relationships of the outcome and independent variables (Szaflarski, Hughe, Szaflarski, Ficker, Cahill, Li, & Michael, 2003). The MLR analysis was applied since the dependent variable was categorical. For some indicators, we used grouped data to identify the intervals. When we used the grouped data for particular variables (for instance, income), we considered them

nominal/categorical variables. As a statistical rule, analysing multiple categorical variables requires MLR analysis. Hence, the MLR was used in this study. This MLR was used to identify the judges of QOL, and P-values less than 0.05 were considered statistically significant.

### 3.5 Ethical consideration

Prior data collection, a confirmation letter was issued by the School of Social Sciences, Universiti Sains Malaysia (USM). The letter was submitted to the Honorary Secretary, Malaysian Government Pensioners Association, Penang to secure their permission and cooperation to collect preliminary information of pensioners. A presentation was conducted to brief the secretary before the research was granted approval. A consent letter for respondents was prepared and submitted before collecting the data.

## 4 Results

### 4.1 Living environment, health and treatment-seeking behaviour of the elderly

In terms of present illness, Table 2 shows that 25.5% of the elderly experience cardiovascular diseases, 25% diabetes, 24% high blood pressure with cardiovascular diseases, 17% diabetes with high blood pressure, 5% eye diseases with visual impairment and the remaining 5% have mental health and depression. For healthcare, 81% of the beneficiaries received healthcare from government hospitals, 11% from government clinic/medical centres and 7% from private hospitals.

Table 2. Living environment and health status of the elderly in Malaysia

| Variables | N (200) | Percent (100) |
|---|---|---|
| *Living environment* | | |
| Bungalow | 15 | 7.5 |
| Semi- detached | 14 | 7.0 |
| Terrace | 80 | 40.0 |
| Kampong house (Malay traditional house) | 43 | 21.5 |
| Flat/Apartment | 45 | 22.5 |
| Condominium | 03 | 1.5 |
| *Present illness* | | |
| Diabetes with high blood pressure | 33 | 16.5 |
| High blood pressure with cardiovascular diseases | 47 | 23.5 |
| Diabetes | 49 | 24.5 |
| Eye diseases with visual impairment | 10 | 5.0 |
| Mental health and depression | 10 | 5.0 |
| Cardiovascular diseases | 51 | 25.5 |
| *Getting healthcare* | | |
| Government hospital | 161 | 80.5 |
| Private hospital | 14 | 7.0 |
| Government clinic /medical centre | 21 | 10.5 |
| Private clinic | 04 | 2.0 |

### 4.2 Satisfaction level of current pension scheme based on gender, marital status, ethnicity and income

Table 3 shows that the mean (1-5) score of satisfaction on gender is male 3.28 and female 3.71. This indicates that the satisfaction level of current living place is near equal between male and female pensioners. The mean score for good health status is male 2.68 and female

3.05, which indicates that females are healthier than males. An interesting finding is that the mean score for bargaining during shopping is male 2.25 and female 1.91, highlighting that females bargain more when shopping. For facing difficulty during spending, the mean score is male 2.47 and 2.71 female. This indicates that the satisfaction levels of females are higher than male pensioners in the current pension systems.

Analyses on the basis of ethnicity shows that the mean score of adequate benefit from the pension scheme is 2.64 for Malay, Chinese 2.20 and Indian 1.77. The findings highlight that most Indian pensioners feel that they are not receiving enough benefits from the pension scheme. In terms of living place, all the ethnicities are satisfied and the mean score of health status is Chinese 3.10, Malay 2.89 and Indian 2.33. It establishes that the health condition of the Chinese is better than other ethnicities. Pertaining to bargain shopping, the mean score is Indian 2.29, Malay 2.14 and Chinese 1.90. The findings indicate that Chinese bargain more when shopping compared to the other ethnicities. A significant finding is that Indians are more dissatisfied with their current pension scheme than Malays and Chinese.

For the results based on marital status, the mean score of ability to saving money is 3.00 for the divorced, married 2.54, widows 2.23 and single 2.18 indicating that only divorced pension holders can save money. For bargaining while shopping, the mean score for divorced is 2.50, married 2.20, single 1.88 and widowed 1.85. It shows that the single and widowed group bargain more while shopping compared to married and divorced cohorts. The mean for satisfied with current living places is higher than the average of 2.58, meaning they are happy with current living places. An interesting fact is that the majority of scores for all items is less than the average mean of 2.58.

The results of satisfaction of pensioners based on income group after retirement reported that the mean score of receiving adequate benefits from the current pension system for the income group of RM3001-5000 (US$731.95-US$1219.51) is 3.05; 2.55 for those with incomes between RM1000-3000 (US$241.14-US$731.70); and 2.00 for the income group earning less than RM1000 (US$243.90). The income group earning less than RM1000 (US$243.90) indicates that they are not satisfied with the current pension systems. The mean score of satisfaction with the current financial condition for the income group RM3001-5000 (US$731.95-US$1219.51) is 2.86, 2.58 for RM1000-3000 (US$241.14-US$731.70), and mean score 1.90 for the income group earning less than RM1000 (US$243.90). Additionally, the mean score of receiving adequate benefits from the current pension system for the income group of RM3001-5000 (US$731.95-US$1219.51) is 3.15, mean score 2.58 for income group RM1000-3000 (US$241.14-US$731.70), and 2.01 for the income group earning less than RM1000 (US$243.90). The mean score of satisfaction with the current financial condition for the income group RM3001-5000 (US$731.95-US$1219.51) is 3.10, 2.54 for RM1000-3000 (US$241.14-US$731.70), and 1.97 for the income group earning less than RM1000 (US$243.90). The mean score of good health status for the income group RM1000-3000 (US$241.14-US$731.70) is 3.03, 2.85 for income RM3001-5000 (US$731.95-US$1219.51), and the income group earning less than RM1000 (US$243.90) acquired the mean of 2.51. The findings highlight that the health status is good for the income group of RM1000-3000 (US$241.14-US$731.70) compared to other groups. All of the groups are happier with their current living places. The findings showed that the lower-earning income group is less satisfied than those earning more. It can be summarised that financial assistance can significantly help to improve the QOL of pensioners in Malaysia.

Table 3. The mean scores of satisfaction level of current pension scheme based on sex, marital status, ethnicity and income in Malaysia

| Items | | Receiving adequate benefit from pension | Satisfied with current financial condition | Ability for savings money | Ability to finance for children education | Satisfied with current living places | Enough assets for meeting emergences | Good health status | Bargaining during shopping | Facing difficulty on spending |
|---|---|---|---|---|---|---|---|---|---|---|
| Indicators | | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean |
| Gender | Male | 2.24 | 2.22 | 2.39 | 2.49 | 3.28 | 2.36 | 2.68 | 2.25 | 2.47 |
| | Female | 2.76 | 2.65 | 2.78 | 3.09 | 3.71 | 2.89 | 3.05 | 1.91 | 2.71 |
| Marital Status | Married | 2.37 | 2.35 | 2.54 | 2.65 | 3.42 | 2.49 | 2.82 | 2.20 | 2.54 |
| | Single | 2.29 | 2.29 | 2.18 | 2.76 | 3.35 | 2.59 | 2.59 | 1.88 | 2.35 |
| | Divorced | 3.50 | 2.50 | 3.00 | 2.50 | 3.00 | 2.50 | 2.50 | 2.50 | 2.50 |
| | Widowed | 2.54 | 2.23 | 2.23 | 2.54 | 3.31 | 2.62 | 2.54 | 1.85 | 2.69 |
| Ethnicity | Malay | 2.64 | 2.47 | 2.62 | 2.72 | 3.47 | 2.64 | 2.89 | 2.14 | 2.58 |
| | Indian | 1.77 | 1.96 | 2.10 | 2.38 | 3.21 | 2.13 | 2.33 | 2.29 | 2.48 |
| | Chinese | 2.20 | 2.40 | 2.60 | 2.90 | 3.40 | 2.50 | 3.10 | 1.90 | 2.35 |
| Income after retirement (RM) | Less than 1000 | 2.00 | 1.90 | 2.19 | 2.48 | 3.14 | 2.19 | 2.48 | 2.24 | 2.44 |
| | 1000-3000 | 2.55 | 2.58 | 2.58 | 2.71 | 3.55 | 2.68 | 2.95 | 2.04 | 2.50 |
| | 3001-5000 | 3.05 | 2.86 | 3.24 | 3.05 | 3.67 | 2.86 | 3.10 | 2.38 | 3.05 |
| Monthly pension (RM) | Less than 1000 | 2.01 | 1.97 | 2.20 | 2.44 | 3.29 | 2.25 | 2.51 | 2.21 | 2.40 |
| | 1000-3000 | 2.58 | 2.54 | 2.64 | 2.79 | 3.48 | 2.71 | 3.03 | 2.04 | 2.46 |
| | 3001-5000 | 3.15 | 3.10 | 3.15 | 3.00 | 3.50 | 2.70 | 2.85 | 2.40 | 3.45 |

## 4.3 Level of satisfaction for QOL of pensioners

Table 4 shows that the average mean score for QOL is 2.58 (SD.694), indicating the QOL is
below the standard of the public pensioners in Malaysia. The maximum and minimum mean
scores value for QOL are (lowest score 1- highest score 5) 4.33 and 1.33 respectively.

Table 4. The mean of satisfaction for QOL of pensioners in Malaysia

| N | | Valid | 200 |
|---|---|---|---|
| | | Missing | 00 |
| Mean | | | 2.5833 |
| Standard Deviation | | | 0.69472 |
| Range | 3.00 | | |
| Minimum | 1.33 | | |
| Maximum | 4.33 | | |

In Table 5, when we consider the overall level of QOL in terms of gender identity,
approximately 51% female and 27% of males are highly satisfied. It seems that females are
more satisfied than males. If we do not disaggregate gender, there is no meaningful difference
in the satisfaction levels. However, with the gender-disaggregated analysis, we find that
females have better satisfaction levels than males.

Table 5. Level of satisfaction for QOL in Malaysia

| Gender | Low | Medium | High |
|---|---|---|---|
| Male | 56 (38.6%) | 50 (34.50%) | 39 (26.9%) |
| Female | 12 (21.8%) | 15 (27.3%) | 28 (50.9%) |
| Total | 68 (34.0%) | 65 (32.5%) | 67 (33.5%) |

## 4.4 Relationship of satisfaction level for QOL based on income and sex

Table 6 shows that the MLR estimates found that when we considered low-level satisfaction
as a reference category, the odds ratio (exp (B)) of males is 0.714 times likely to be
adequately satisfied where the p-value is 0.438 (P>0.05) with no significance. Moreover,
when we consider low satisfaction as a reference category, we found that the odds ratio (exp
(B)) for males is 0.298 times likely to be more satisfied where the p-value is 0.003 (P<0.05)
with significance. In terms of financial conditions, there is no significant differences in their
satisfaction level, providing a significant odds ratio (exp (B)) of 0.158 with p-value 0.004
(P<0.05). In summary, there is no significant relationship between income after retirement
and income from pension scheme with the satisfaction level for QOL among public
pensioners in Malaysia. However, in terms of gender, the satisfaction levels of females are
higher than the satisfaction levels of males.

Table 6. Relationship of satisfaction level for QOL based on income and sex: Multinomial logistic regression
estimates

| Satisfaction level for QOL | | B | Std. Error | Wald | Df | Sig. | Exp (B) |
|---|---|---|---|---|---|---|---|
| | Intercept | .000 | .707 | .000 | 1 | 1.000 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Medium | Monthly pension (RM) less than 1000 | -.141 | .746 | .036 | 1 | .850 | .868 |
| | RM1000-3000 | .074 | .758 | .010 | 1 | .922 | 1.077 |
| | RM3001-5000 | 0[b] | . | . | 0 | . | . |
| | Intercept | 1.099 | .577 | 3.621 | 1 | .057 | |
| High | Monthly pension (RM) less than 1000 | -1.846 | .644 | 8.206 | 1 | .004 | .158 |
| | RM1000-3000 | -.746 | .632 | 1.395 | 1 | .238 | .474 |
| | RM3001-5000 | 0[b] | . | . | 0 | . | . |
| | Intercept | .223 | .671 | .111 | 1 | .739 | |
| Medium | Income after pension (RM) less than 1000 | -.348 | .716 | .237 | 1 | .627 | .706 |
| | RM1000-3000 | -.223 | .719 | .096 | 1 | .756 | .800 |
| | RM3001 -5000 | 0[b] | . | . | 0 | . | . |
| | Intercept | 1.099 | .577 | 3.621 | 1 | .057 | |
| High | Income after pension (RM) less than 1000 | -1.917 | .655 | 8.557 | 1 | .003 | .147 |
| | RM1000-3000 | -.811 | .626 | 1.679 | 1 | .195 | .444 |
| | RM3001-5000 | 0[b] | . | . | 0 | . | . |
| Medium | Intercept | .223 | .387 | .332 | 1 | .565 | |
| | Male | -.336 | .433 | .603 | 1 | .438 | .714 |
| | Female | 0[b] | . | . | 0 | . | . |
| High | Intercept | .847 | .345 | 6.030 | 1 | .014 | |
| | Male | -1.209 | .403 | 8.994 | 1 | .003 | .298 |
| | Female | 0[b] | . | . | 0 | . | . |

a. The reference category is: Low satisfaction level. b. This parameter is set to zero because it is redundant.

Furthermore, Table 7 found concerning recommendations to improve QOL, that 51% of the elderly mentioned that the government should increase the pension assistance, 21% indicated social safety nets, 14% introduce pensions in the private sector, 9% free healthcare and the remaining 7% suggested creating new employment opportunity for the elderly to generate income.

Table 7. Recommendations for improving QOL of elderly in Malaysia

| Recommendations by pensioners to improve QOL | N (200) | Percent (100) |
|---|---|---|
| Increased amount and benefit of pension assistance | 101 | 50.5 |
| Introduce social safety nets for all citizens | 41 | 20.5 |

| | | |
|---|---|---|
| Provided free healthcare of the elderly by the government | 18 | 9.0 |
| Introduce pension schemes in the private sector | 27 | 13.5 |
| Employment opportunity for older for income generation | 13 | 6.5 |

## 5   Discussion

The objective of this study was to examine the public pension scheme and QOL of the elderly in Malaysia. The results showed that the highest 40% of the pensioners lived in the terrace house, and 81% took medical support from the government general hospital. The mean score on the satisfaction level was male 3.28 and female 3.71, whereas the mean score of adequate benefit from the pension scheme was 2.64 Malay, 2.20 Chinese and 1.77 Indian. According to the living places, the mean score is 3.47 for Malay; 3.40 Chinese; and 3.21 Indian. In terms of health index, the mean score of the health status of Chinese was 3.10, Malay 2.89 and Indian 2.33. The mean scores on the ability for savings money were highest among the divorced with 3.00, 2.54 married 2.54, 2.23 widows and 2.18 single. The overall satisfaction level among the pensioners is 34% low, 34% high and the 33% medium. Finally, 51% of the pensioners mentioned that the government should increase the amount of pension assistance.

Results of the study showed that the average mean score for QOL is 2.58 (SD.694) indicating the QOL is below the standard expected by the public pensioners in Malaysia. The insecurity of income among pensioners could be low due to low education, low pay and low skills with high life expectancy (Yusuf, 2012). This study found that education level and employment rate, occupation and marital status influence the socio-economic conditions of the elderly in Malaysia. The education qualification affects the pension contributions after retirement, with highly educated people tending to receive higher salaries than increase savings after retirement (Ju et al., 2017; Yusuf, 2012).

This study revealed that the income of the elderly was very low, with no significant difference between the income before and after retirement. The analysis of this study confirms that the mean score for QOL is 2.58, and income from a pension was not significantly related to QOL (Ng & Hamid, 2013). Our findings corroborate past findings on the elderly in Malaysia with low-income earners more vulnerable than higher-income groups (Lloyd-Sherlock & Agrawal, 2014; Tey et al., 2016). Borg et al. (2008) established a significant relationship between income and the QOL of the elderly. The most important sources of social income for the elderly were from their adult children. However, the extended family system is being changed to a nuclear family system, certainly distressing and putting tension on the family as the elderly assuming the role of the caregiver (Hew, 2007; Ng, Lim, Jin, & Shinfuku, 2005; Selvaratnam & Tin, 2007). Support from children and income from savings, rental and pensions were often insufficient to meet the needs of pensioners and maintain their QOL (Tolos, 2012). The life expectancy is high in Malaysia and higher longevity means that the elderly require higher levels of savings to maintain their living standards (Yusuf, 2012).

Additionally, the savings do not ensure the elderly are safe from poverty after retirement (Vaghefi, Kari, & Talib, 2016). The high cost of living and increasing prices of goods, services and utilities pose a challenge to maintaining QOL in Malaysia. Most people expect that economic problems can be managed through enhanced pension systems (Samad & Mansor, 2013).

Malaysia is a multi-ethnic country comprising three ethnic groups, namely Malays, Chinese and Indians. Based on ethnicity, the findings highlight that the mean score of adequate benefit

from the pension scheme is 2.64 for Malay, Chinese 2.20 and Indian 1.77. The study indicated that Indians feel that they are not benefiting enough from their pensions. Malaysia is facing socio-demographic challenges and changes due to a rapidly ageing population and the industrial revolution. It may be one of the reasons that Malaysians are facing challenges. Further, socio-economic factors and cultural results in different ethnic groupings in terms of rural–urban distribution and profession (Tey et al., 2016). In terms of health, the mean score of health status is 3.10 for the Chinese, Malay 2.89 and Indian 2.33. It established that the health condition of Chinese pensioners is better than other ethnicities. It could be explained by Chinese being generally more educated, observe healthier diets, are hardworking, tend to have smaller families, and observe positive healthcare practices (Tey et al., 2016).

Currently, the elderly are not increasing only in numbers. They are also experiencing increased rates of Non-Communicable Diseases (NCD) (Ambigga et al., 2011). The NCD, including diabetes, hypertension, heart disease, especially among the elderly, is increasing (Anderson & Phillips, 2006). Currently, one-third to one-fifth of the elderly are facing heart diseases, diabetes, high blood pressure, and diabetes with high blood pressure. This finding is consistent with Ambigga et al. (2011), Rechel et al. (2013), Rowe (2015), and Tey et al. (2017). Mental health problems and visual impairment and blindness are also prominent among the elderly in Malaysia (Ambigga et al., 2011; Rechel et al., 2013). The prevalence of depression among the elderly is also higher (18%) due to financial hardship (Ambigga et al., 2011). Improved longer life expectancy indicates vulnerability to diseases and infirmities, resulting in greater healthcare cost and makes caring for the elderly more challenging. It means that elderly people may suffer from ailments that require regular treatment (Yahaya et al., 2010). The lack of widespread health insurance system has caused economic suffering among the elderly who have to pay excessive healthcare costs. In addition, the elderly might isolate from relations or neighbours and find it hard to manage complications such as accidents, disasters and acute diseases. The elderly with health problems and disabilities typically require dependent living (Yahaya et al., 2010). Additionally, the expansion of services for the elderly in Malaysian healthcare is slow despite the need for long-term management of this cohort (Ambigga et al., 2011). It indicates that the social security system in Malaysia is insufficient (Masud, Haron, & Gikonyo, 2008). Given the above, while there is a robust innate judgement that pension schemes should improve the elderly's health status, this result is dependent on several factors (Lloyd-Sherlock & Agrawal, 2014).

Housing is essential for human welfare. This study concluded that pensioners in Malaysia are highly satisfied with QOL in terms of housing (Karim, 2012; Ramli et al., 2013). One reason is due to the Malaysian government's continuous efforts to ensure that all Malaysians, especially the low and middle-income groups, have the opportunity to buy houses by establishing affordable-housing programmes such as Programme Perumahan Rakyat (people's housing), *Rumah Mampu Milik* (affordable home) and Rumah Mesra Rakyat (friendly homes). These programmes allow low-income households the opportunity to buy low-cost housing with access to electricity and water. This finding is consistent with Karim (2012) and Ramli et al. (2013). Moreover, the satisfaction level of current living places is higher due to the provision for an early pension to finance the purchase of housing which has resulted in a greater proportion of Malaysian citizens owning homes. The provision to withdraw pensions early has had a significant impact on homeownership, and older Malays have benefitted from rent-free living after retirement (Doling & Omar, 2012).

The study established that females (51%) had a significantly higher QOL with a P-value of .003 (P<0.05) compared to males. For example, it would be interesting to learn more about

the gender gap in terms of satisfaction. This could be because the perception of males for satisfaction level with a pension was more negative than females (Onunkwor et al., 2016). Studies indicated lower QOL among males and attributed their findings to feelings of unpleasantness among elderly males due to low confidence and negative observations of pensions among the elderly in Malaysia (Pereira et al., 2006; Vitorino, Paskulin, & Vianna, 2012). This research generated evidence that the public pension scheme in Malaysia is insufficient to maintain the QOL. The findings of this study will enhance the development of the practitioners' capacity to formulate stronger policies and planning to improve the QOL for the elderly in Malaysia.

## 6 Limitations of the study

This study has several limitations. The first limitation was that the participants were limited to 200 and not nationally representative, as only public pensioners in Penang were included. Thus, the findings cannot be implicated to the entire Malaysia. It is crucial to research diverse perceptions in order to obtain authentic data to guide the framing of robust policies, legislation, and approaches to cater to the needs of the elderly in Malaysia. Hence, we encourage others to investigate our findings to include more diverse and a larger sample size of pensioners in Malaysia. The second limitation concerns the measurement of the QOL Index. There is still a lack of consensus among researchers about its definition reflected in the choice of items for QOL measurement. A common protocol and fully structured design were not possible for QOL indicators due to lack of relevant national data and limited resources for research in a developing country like Malaysia (Skevington, Lotfy, & O'Connell, 2004). Des being the lack of an agreed definition or standard form of measurement for QOL in Malaysia, this study used a set of characteristics to measure the QOL which is consistent with Zhao, Heath and Forgue (2005) and the Western society as the WHO used the measurements of physical health, psychological health, social relations and environment (Gou, Xie, Lu, & Khoshbakh, 2018).

## 7 Conclusions and policy implications

The study provided insightful findings into the pension scheme in Malaysia. It highlighted several indicators of the QOL components and provided the current status on those indicators for pensioners. We acknowledge that this study could not provide sufficient explanation about the variation of the mean scores on different components across gender, ethnicity, marital status, age, education level, and other segregations. We suggest further comparative study that explains these variations further. Despite these limitations, we believe that this study explored important issues concerning the living condition, marital status, ethnicity, income, health facilities and overall satisfaction level of the services on the QOL Index. The findings will be a useful guideline to policymakers to formulate policy, particularly to review the retirement age due to higher longevity and government intervention to enhance elderly care facilities (Yusuf, 2012; Ali, & Hatta, 2014). Formulating an overarching policy on social protection, for example, to formulate legislation is essential to improve the QOL of the elderly. This study offers a useful guideline to maintain a standard of living of the elderly (Tey et al., 2016).

The findings are also significant for development practitioners such as non-governmental organisations (NGOs) workers and human rights workers in Malaysia to understand the present status of the pensioners and their problems. This is imperative for the elderly, particularly their rights and well-being as key for development practitioners. Moreover, there is limited evidence in Malaysia about the lives and livelihoods of the elderly and their QOL.

A growing body of literature indicates that social work plays a significant role in improving the elderly's' lives and livelihoods (Ali, Hatta, & Azman, 2014). The scope, role and contribution of social work include improving the elderly's hazardous conditions and poverty (Kerr, Gordon, MacDonald, & Stalker, 2005); marital problems, financial stress, or chronic illness by using QOL scales (Lautar, 2015); assessment of the needs of elderly, older care planning and counselling for better QOL (Kerr et al., 2005); the betterment of the elderly's economical, physical, and psychological problems (Samad & Mansor, 2013); discrimination and social exclusion of elderly (Ali & Hatta, 2010); the well-being of the elderly in Malaysia (Lloyd-Sherlock & Agrawal, 2014); improving their QOL (Ambigga et al., 2011); and illness and social security schemes (public and private) (Tey et al., 2016). Finally, the findings of our paper support empowering the elderly and their caregivers with skills, knowledge and positive attitudes towards caring for the elderly (Ambigga et al., 2011).

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