



UNIVERSITI PUTRA MALAYSIA

***DETERMINANTS OF LIFE SATISFACTION AMONG FEMALE-HEADED
HOUSEHOLDS IN MALAYSIA***

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**DETERMINANTS OF LIFE SATISFACTION AMONG FEMALE-HEADED
HOUSEHOLDS IN MALAYSIA**

By

THINAGARAN A/L MOGA DASS

**Thesis Submitted to the School of Graduates Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Master of Science**

July 2018

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

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THINAGARAN A/L MOGA DASS

July 2018

Chairman : Associate Professor Mohamad Fazli Sabri, PhD
Faculty : Human Ecology

The general objective of this study was to determine the factors affecting life satisfaction among female-headed households in Malaysia. Five states in Malaysia were chosen through multi-stage sampling method. A total of 527 respondents were participated in this study. Descriptive analysis, independent sample t-test, One-way Analysis of Variance (Anova), and Multiple regression were used in the Statistical Package for Social Science version 22.0 (SPSS).

The results show that the mean age for the respondents was 53.14 years old. Majority of the respondents were Malay followed by others, Indian and Chinese. The results show that 60.2% of them are having moderate level of financial capability, 57.8% of them in moderate level of financial vulnerability and 69.8% of them possess a moderate level of life satisfaction. Pearson correlation indicated that, personality ($p = .000$, $b = .312$), financial capability ($p = .000$, $b = .159$), and financial vulnerability ($p = .000$, $b = -.224$) has significant relationship with life satisfaction. Meanwhile, the independent sample t-test shows that higher income group has better life satisfaction compared to lower income group ($t\text{-value} = -3.531$, $p = .000$), non-savers has higher life satisfaction compared to people who frequently save ($t\text{-value} = -4.277$, $p = .000$) and female-headed households with assets more than debt has a higher life satisfaction ($M = 12.7660$, $SD = 2.481$). The multiple regressions show that, personality, financial capability and financial vulnerability are the significant predictors of life satisfaction among female-headed household in Malaysia.

This study suggested that the findings are useful for the female-headed households, policy makers and non-governmental organizations. More attention should be given in building their self-confidence, and more control of themselves rather than being dependent on others on decision making. More knowledge and enhancement can be done on empowering the female-headed household on the modern financial instruments. By doing so, it can increase the financial capability and reduce the financial vulnerability of female-headed household in Malaysia towards a better life satisfaction.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

PENENTU KEPUASAN HIDUP DALAM KALANGAN IBU TUNGGAL DI MALAYSIA

Oleh

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Kajian ini bertujuan untuk mengenalpasti faktor mempengaruhi kepuasan hidup ibu tunggal di Malaysia. Lima negeri dalam Malaysia telah dipilih melalui kedah persampelan rawak berlapis. Seramai 527 orang responden telah menyertai kajian ini. Analisis deskriptif, ujian-t sampel bebas, Analisis Varian sehala (ANOVA) dan regresi pelbagai telah digunakan melalui *Statistical Package for Social Science version 22.0 (SPSS)*.

Dapatan kajian menunjukkan purata umur responden adalah 53.14 tahun. Majoriti responden adalah kaum Melayu diikuti dengan lain-lain, India dan Cina. Dapatan menunjukkan bahawa 60.2% mempunyai tahap keupayaan kewangan yang sederhana, 57.8% dengan tahap kerentanan kewangan yang sederhana dan 69.8% daripadanya mempunyai tahap kepuasan kehidupan yang sederhana. Korelasi Pearson menunjukkan bahawa personaliti ($p = .000$, $b = .312$), keupayaan kewangan ($p = .000$, $b = .159$), dan kerentanan kewangan ($p = .000$, $b = -.224$) mempunyai hubungan yang signifikan dengan kepuasan kehidupan. Selain itu, ujian-t menunjukkan golongan berpendapatan tinggi mempunyai kepuasan kehidupan tinggi ($t\text{-value} = -3.531$, $p = .000$), responden yang membuat simpanan mempunyai kepuasan kehidupan yang tinggi ($t\text{-value} = -4.277$, $p = .000$), dan kumpulan yang mempunyai asset lebih daripada hutang mempunyai kepuasan kehidupan yang baik ($M = 12.7660$, $SD = 2.481$). Regresi pelbagai mendapati bahawa kesemua pembolehubah (personaliti, keupayaan kewangan, kerentanan kewangan) mempunyai pengaruh terhadap kepuasan kehidupan ibu tunggal di Malaysia.

Kajian ini mencadangkan bahawa penemuan ini berguna untuk ibu tunggal, penggubal dasar dan pertubuhan bukan kerajaan. Lebih perhatian harus diberikan dalam membina keyakinan diri mereka, dan mempunyai lebih banyak kawalan diri agar mereka tidak terlalu bergantung kepada orang lain ketika membuat keputusan. Pengetahuan kewangan harus dipertingkatkan memperkasakan ibu tunggal untuk lebih menyertai dalam pasaran kewangan yang moden ini. Dengan berbuat demikian, kita dapat meningkatkan keupayaan kewangan dan mengurangkan kerentanan kewangan ibu tunggal di Malaysia ke arah kepuasan hidup yang lebih baik.



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Finally, I would also like to show gratitude to all the single mother associations and every single mother who helped and cooperated throughout the data collection process in the mentioned location of study.

I certify that a Thesis Examination Committee has met on 6 July 2018 to conduct the final examination of Thinagaran a/l Moga Dass on his thesis entitled "Determinants of Life Satisfaction Among Female-Headed Households in Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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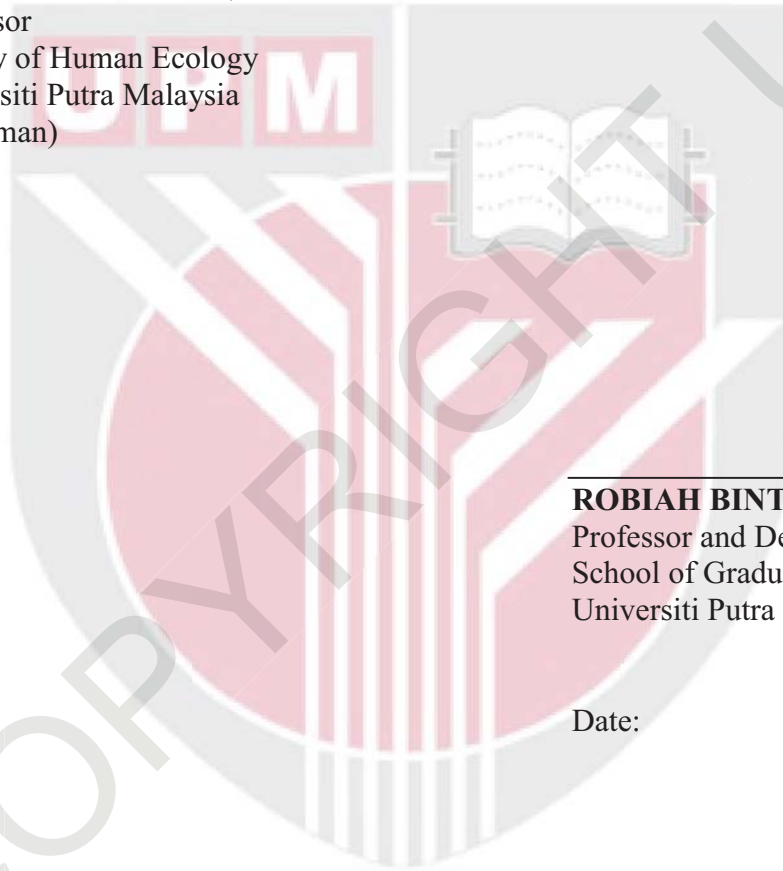
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LIST OF ABBREVIATIONS

AKPK	<i>Agensi Kaunseling dan Pengurusan Kredit</i> (Credit Counseling and Debt Management Agency)
BHPS	British Household Panel Survey
BNM	Bank Negara Malaysia
CRRC	Consumer Research and Resource Centre
CPI	Consumer Price Index
CFVI	Consumer Financial Vulnerability Index
ECRI	European Credit Research Institute
EPF	Employees Provident Fund
EPU	Economic Planning Unit
FINRA	Financial Industry Regulatory Authority
FOMCA	Federation of Malaysia Consumer Associations
LCH	Life Cycle Hypothesis
MWI	Malaysian Well-being Index
MITI	Ministry of International Trade and Industry
NGO	Non-Governmental Organization
NFCS	National Financial Capability Study
OECD	Organization for Economic Co-operation and Development
UNISA	University of South Africa

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CHAPTER 1

INTRODUCTION

1.1 Background

Malaysia is gearing itself to becoming a high-income nation by the year 2020 and has seen a remarkable transformation throughout the years since its independence. From an economy dominated by the production of raw natural resources, Malaysia today has a diversified economy and has transformed into a leading exporter of palm oil, natural gas, electronic parts and components, and electrical appliances. Since its independence, the incidence of poverty in general declined from 49.3% to 0.6% (Economic Planning Unit, 2015) and the focus is now shifting to enhance inclusiveness and equitable opportunities for all Malaysians alongside sustainable improvements in individual and societal well-being (OECD, 2016).

Now, the nation is in the final phase of Vision 2020 which is driven by the 11th Malaysia Plan (2016-2020) emphasizing the need for greater inclusiveness, especially in raising the living standards of the bottom 40% of the population by income (B40), reducing the income and infrastructural gaps between the rich and the poor, and increasing the participation of women in the economy (OECD, 2016). In achieving this, the main strategy is to increase the annual household income of the B40 community from RM 2,537 in 2014 to RM5,270 in 2020 (Economic Planning Unit, 2015) by enhancing the economic participation of urban households through income-generating activities, human capital development, and micro-enterprise support programs in elevating the average income of the people and thus their well-beings. A continuous rise in productivity growth is the route to attaining better standards of living and an improved social well-being, which is implied from better living conditions, higher purchasing power, and greater access to education, transportation, and quality housing, amongst others (Ministry of International Trade and Industry (MITI), 2017). In the 11th Malaysian Plan, the Malaysian Well-being Index (MWI) is targeted to increase by 1.7% per annum compared with 1.2% as recorded during the 10th Malaysian Plan.

As a rapidly developing economy, the labour force participation of Malaysia in 2016 is 67.7% and the number increased by 1.0% to 14.7 million persons compared to 2015 (Department of Statistics Malaysia, 2016). The participation of women has noticeably increased by 0.2% in 2016, which marked 54.3% compared to the year 2015 and it is expected to increase over the years (Department of Statistics Malaysia, 2016). Rising living costs are one of the key factors contributing to the increasing rate of working women in Malaysia along with the globalization effect which has opened up more employment opportunities for women in the expanding service economy and in the globalised manufacturing industries. Malaysia's consumer price index (CPI) increased by 3.5% to 120.9 in December 2017, from 116.8 in the corresponding month of the

preceding year. Noticeable increases were the indices for Transport (+11.5%), Food & Non-Alcoholic Beverages (+4.1%), Restaurants and Hotels (+2.6%), Furnishings, Household Equipment & Routine Household Maintenance (+2.4%), Health (+2.3%) and Housing, Water, Electricity, Gas & Other Fuels (+2.2%), (Department of Statistics Malaysia, 2018). Correspondingly, the average price of 1 litre of RON95 petrol was RM2.27 in December 2017 compared to RM1.90 in December 2016. As for RON97, the average price increased to RM2.55 in December 2017 compared to RM2.25 in December 2016, (Department of Statistics Malaysia, 2018). In such an economic environment, women have the responsibility to support the family financially to cope with the rising living costs by working, especially if they are the sole breadwinner of the household.

In addition, such situations are more vulnerable to women who are the head of the households, who are identified as female-headed households or commonly known as single mothers. The Ministry of Women, Family and Community Development has reported that there are 235,000 single mothers in Malaysia who fit the following definition: (1) women who are divorced and have children; (2) women are married but their husbands are disabled and unable to support the family; (3) women who are not married but have adopted or illegitimate child (Ministry of Women, Family and Community Development, 2014). The term female-headed households (Ahmad & Sabri, 2015; Ahmad, Sabri, Abd Rahim, & Osman, 2017; Jamal & Abdul Rahman, 2015) and single mother (Faizah & Azian, 2013; Noor, 2015; Rahman, Abdullah, Darus, & Mansor, 2017) has been used interchangeably in many studies in Malaysia based on the definition provided by the ministry. The challenges confronted by female-headed households as the head of the family are arduous because they have to bear dual responsibilities, where they are not only breadwinners, but also the managers and educators of their children (Faizah & Azian, 2013).

Past studies indicate that almost half of all single mothers (45%) have to support schooling children, 17% have to support unemployed children, 8% need to support children studying at the tertiary level, 3% have to support children not of schooling age, while 1% have to support sick children (Faizah & Azian, 2013). Hence, the female-headed households in developing countries deserve special attention since they are typically disadvantaged regarding access to land, labor, credit and insurance markets, discriminated against by cultural norms, and suffering from, among others, high dependency burdens, economic immobility, the “double day burden” of their heads (Ramaprasad, 2009), and crucial for single mothers in providing immediate necessities to their dependents (Zarina & Kamil, 2012). Overwhelming roles and responsibilities are one of the key factors of stress among the female-headed households (Hashim, Hashimah, Azwan, & Noraida, 2015). It is important for the female-headed households to ensure their well-being in order to improve the well-being of their dependents.

Female headed households are always associated with higher poverty and are exposed to financial strains (Klasen, Lechtenfeld, & Povel, 2011). Similarly, Faizah and Azian, (2013) in their study found that most of the female-headed households in Malaysia do not receive adequate assistance from the government, despite how 75% of the single-mother respondents are still living below the poverty line or categorized as B40 communities. Income is one of the strongest predictors of life satisfaction among Malaysian and an increase in financial satisfaction leads to overall life satisfaction; employment, income and household financial situations have significant impact on the life satisfaction on Malaysians (Boo, Yen, & Lim, 2016; Howell, Chong, Howell, & Schwabe, 2012). Hence, The Eleventh Malaysia Plan (2015) aspires to elevate the life standards and well-being of the B40 community, which includes the female-headed households by improving income levels and wealth creation, as well as increasing education and skill levels.

Productive resources and opportunities make up two sides of the same coin. With greater control and access to financial aspects, a woman has more power to make decisions that will positively impact her personal well-being (Cheston & Kuhn 2002). At the same time, greater opportunities to make choices in relation to finances would allow her to manage her resources to secure sustained economic success because without financial independence, women cannot defend their rights and they cannot be independent (Melhuish, Belsky, & Malin, 2008).

1.2 Statement of Problem

Everyone desires to lead a good life, but what does a good or better life mean? Defining well-being is a challenging task, yet experts and common people around the world would agree that it is the evaluation of both the objective and subjective components of life. Objective well-being is fundamental in assessing people's living conditions and quality of life, while subjective components reflect on an individuals' experience in life situations and the cognitive judgement of their own lives, which includes life satisfaction (OECD, 2011). Basically, life satisfaction is the cognitive component of subjective well-being and involves a self-evaluation of the quality of one's life (Antaramian, 2017) or how one evaluates their life as a whole (OECD, 2011). Individuals with higher life satisfaction tend to possess better overall physical health, more positive social relationships, receive more social support and have better job performance compared to individuals with lower levels of life satisfaction (Siahpush, Spittal, & Singh, 2008; Barger, Donoho, & Wayment, 2009; and Pavot & Diener, 2008). Most importantly, research evidence of Diener (2012) indicates that life satisfaction is an important factor for an individual to operate at optimal functioning or higher productivity levels.

Generally, women are reported to have lower life satisfaction compared to men (Zakaria, Ab. Kadir, & Subhi, 2017), and the well-being of women are strongly affected by life events, personal resources, roles, and negative affectivity which influence women's health directly and indirectly (Noor, 2015). Over time, the role of

women has changed due to economic development and employment opportunities which results in them having to juggle demands arising from the family as well as the workplace. Moreover, life as a female headed-household can be a challenging task for even the most successful, educated, or invested woman as they are the sole breadwinner of the family who has to face many hassles, stressors and strains by sacrificing their own well-being. Female-headed households are more apt to experience numerous losses, economic hardship and rising demands of childcare and family responsibilities compared to married women. Besides that, they are more likely to work longer hours, receive less emotional and tangible support, have less stable social networks (Harknett & Hartnett, 2011), facing social stigmas and isolations which lead to frustration and loneliness (Faizah & Azian, 2013) and higher levels of stress and depression compared to married mothers (Hashim et al., 2015). Such adversities lead them to face psychological stress (Booth & Amato, 1991), lower life satisfaction (Lucas, 2005) and report frequent medical visits (Canady & Broman, 2003), which will slowly affect productivity and outcomes in life. Although existing studies indicates that psychological factors have impact on life satisfaction, economic measures are also need to be taken in consideration in order to study how financial aspects could affect well-being (Gray, 2014). Thus including financial aspects like financial capability and financial vulnerability in life satisfaction study may provide a new perspective of determinants.

From a psychological point of view, personality plays a huge role in determining happiness and life satisfaction. Magnus and Diener (1991) found that personality traits influence life satisfaction, even after controlling for the influence of intervening life events. This finding suggests that life events or environmental changes like divorce and widowhood have effects on life satisfaction, and personality traits are one of the main pillars which drives an individual in handling the environment changes (Heady & Wearing, 1989). Female-headed households are likely to suffer emotional distress and depression compared to married mothers (Afifi, Cox & Enns, 2006) and their children tend to develop antisocial behaviour, with some involved in social problems like drug abuse, vandalism and gangsterism (Baharudin, Krauss, Yacoob & Pei, 2011). Existing studies on the personality of female-headed households in Malaysia were mainly focused profiling, emotion, fate and cultural practices in relation with life satisfaction and well-being (Abdul Kadir & Ali, 2012; Faizah & Azian, 2013; Noor, 1999). The authors suggested that there is a need in exploring other variables of personality like religiosity, acceptance of life, positive optimal functioning, and life experience in order to explore how these variables affect life satisfaction of female headed households in the Malaysian context.

Life changing events like the death of a husband, divorce, abandonment by a husband, and sickly or specially challenged spouses also has increased the financial vulnerability among female-headed households (Ahmad & Sabri, 2015). Financial vulnerability primarily results in higher levels of chronic stress of female-headed households compared to married women (Noraida, Azwan, Hashim, & Hashimah, 2015). Evidence from a prior study in Malaysia also found similar facts that female-headed households rarely make savings and often run out of money (Mohd & Noor,

2011), due to difficulties in getting a job as they have less experience, low education and increased age (Ishak, Selvaratnam, & Idris, 2009), especially those aged above 40 years who often face great difficulties entering or re-entering the workforce and have very minimal savings (UNDP, 2012). Adding to this, the effect of rising costs of living has a huge impact on female-headed households as it will make them unable to save money or invest, as the income is only sufficient for their living. With dependents, such situations decelerate the purchasing power of female-headed households and it is difficult to sustain their daily consumption. A financially vulnerable household is unable to face monthly expenses, and to balance the budget, delays in utility bill payments, difficulties in shopping for necessities or paying the rent will later on drag them into indebtedness. Being financially vulnerable definitely makes individuals financially incapable, leading to lower life satisfaction (Chou & Chi, 2002). Thus, it is important to study to what extent does financial vulnerability affects the life satisfaction of female-headed household in Malaysia as most of the existing research discussed above were only focused on the problems not on the aftermath of it.

Socioeconomic status has been suggested as an important and sustainable means to move the poor out of poverty and improve wellbeing (Zarina & Anton, 2012). Socioeconomic status markers like income, saving behavior and debt-to-asset ratio are associated with greater purpose of life, self-acceptance, and personal growth (Kaplan, Shema, & Claudia, 2009). In addition, higher socioeconomic groups have greater control over the circumstances and direction of their work compared to lower socioeconomic groups (Nettle, 2005). In Malaysia, household incomes below RM1500 fall into the category of relative poverty or widely known as *mudah miskin* (Economic Planning Unit, 2015). According to Faizah and Azian (2013), 35% of the southern female-headed households do not have any source of income, 40% have an income of less than RM 1000 per month and 23% have a monthly income of between RM 1000 to RM 2000. Identically, Ahmad and Sabri (2015) also found that three quarters of female-headed households in Malaysia only received income below the range of RM500 to RM 1500 monthly and only 25% earn above RM 1500 monthly. Lower income households experience a disproportionately larger effect from rising inflation as the poorest 10% of Malaysians spend almost 70% of their income on food and housing alone (Munoz Moreno et al., 2016). On saving aspects, Zarina and Anton (2012) pointed out that low income earners have little savings throughout the year, and mostly for specific reasons like emergencies and festivals only. Limited income limits saving motives and discourages risk tolerance and retirement-related savings for the future. Apart from that, Malaysians were reported with high household debts reaching 89.1% in 2015 from around 60% in 2008 due to personal loans, hire purchase, being a guarantor, and credit cards (Bank Negara Malaysia, 2015). Against such backgrounds, female-headed households are economically disadvantaged and they face the most severe economic difficulties in asset accumulation (Manning, Stewart, & Smock, 2005; Yamokoski & Keister, 2006; and Branigan and Keebaugh, 2005).

Growing financial vulnerability in poor families requires attentive and vigorous action. One of the approaches is by improving financial capability, which is the “people’s ability to manage and take control of their finances”. Conceptually, low financial capability is distinct from having low income (Mark Taylor, 2011). Financially capable individuals may have low income and people with higher income may possess lower financial capabilities, but what matters is how they are making appropriate financial decisions, understanding and managing credit and debt, and classifying products and services that are relevant. Individuals with higher financial capabilities possess the knowledge, skills, and access to tools to effectively manage their finances and positively contribute to the well-being of humans (Huang, Nam, & Lee, 2015; Serido, Shim, & Tang, 2013). Surveys conducted by Bank Negara Malaysia (BNM) revealed that more than 75% of Malaysians find it difficult to come up with RM1,000 of immediate cash for emergencies, and they are unable to practice long term financial planning as only 40% of Malaysians think themselves financially ready for retirement (Bank Negara Malaysia, 2015). Furthermore, life insurance take up rate is only 16% (Bank Negara Malaysia, 2017). Under such circumstances, earlier studies suggested that women are less financially literate (Lusardi & Mitchell, 2011) and less confident about their financial futures, knowledge on retirement needs, and about current financial situations (Hira, Rock & Loibl, 2009) compared to men. In such context, there are no researches available on the financial capability of female-headed households in Malaysia as most of the study is focused on financial literacy and knowledge. By including financial capability in this study, it will provide statistical information on how female-headed households in Malaysia manage their money and the effects on their life satisfaction.

In essence, studies show that female-headed households have been a vulnerable community facing many challenges to support their dependents. Women are one of the pillars in a nation’s development. Thus, it is vital to determine the factors affecting the life satisfaction of female-headed households in Malaysia, especially financial aspects, to acquire a better economic status to cope with rising living costs and at the same time enhance their life satisfaction. Thus, the present study aims to study how factors like personality, financial capability and financial vulnerability impact life satisfaction of female-headed households in Malaysia’s context which includes individual characteristics and financial aspects (Income, saving behavior, and debt-to-asset ratio).

1.3 Research Questions

Based on the above issue, there are several questions regarding the life satisfaction among female-headed households in Malaysia. This study will be performed to obtain answers to the following research questions:

1. What is the level of financial capability, financial vulnerability and life satisfaction among the female-headed households in Malaysia?
2. Is there any difference in life satisfaction based on income level, saving behaviour and debt-to-asset ratio?
3. Is there any relationship between the personality, financial capability, and financial vulnerability towards the life satisfaction among the female-headed households in Malaysia?
4. Which factors uniquely predict the life satisfaction of female-headed households in Malaysia?

1.4 Research Objectives

1.4.1 Main Objective

This study aims to determine the factors affecting life satisfaction among female-headed households in Malaysia.

1.4.2 Specific Objectives

1. To examine the level of financial capability, financial vulnerability and life satisfaction among the female-headed households in Malaysia.
2. To explore the differences in life satisfaction based on income level, saving behaviour and debt-to-asset ratio.
3. To determine the relationship between personality, financial capability and financial vulnerability towards life satisfaction among the female-headed households in Malaysia.
4. To determine the factors that uniquely predict the life satisfaction of the female-headed households in Malaysia.

1.5 Research Hypotheses

Based on the research questions raised, the following hypotheses were tested.

- H₀1: There is no significant difference in life satisfaction among the female-headed households in Malaysia based on income.
- H₀2: There is no significant difference in life satisfaction among the female-headed households in Malaysia based on saving behaviour.
- H₀3: There is no significant difference in life satisfaction among the female-headed households in Malaysia based on debt-to-asset ratios.
- H₀4: There is no significant relationship between personality and life satisfaction among the female-headed households in Malaysia.

- H₀5: There is no significant relationship between financial capability and life satisfaction among the female-headed households in Malaysia.
- H₀6: There is no significant relationship between financial vulnerability and life satisfaction among the female-headed households in Malaysia.
- H₀7: Personality, financial capability and financial vulnerability are not significant determinants of life satisfaction among the female-headed households in Malaysia.

1.6 Scope and limitations of study

Although this study has yielded some preliminary findings, its design is not without any flaws. Target respondents of this study are the female-headed households in Malaysia. Although the respondents are physically visible, they are invisible in the society (Ahmad & Sabri, 2015). This is because not all the single mothers in Malaysia are engaged with single mother associations throughout Malaysia and not registered persons under the Ministry of Women, Family and Community Development. This study is limited to the single mothers and single mother associations registered under the Ministry of Women, Family and Community Development. Thus, the real number of female-headed households in Malaysia is uncertain and this study only utilizes data provided from the ministry as the population for this study. Moreover, quantitative research that uses close-ended questionnaires may force respondents into particular response categories which limit the range of response. Apart from that, biasness might occur in this study as the nature of the survey is a self-administrated questionnaire. Therefore, the respondents might try to choose the “correct” answer rather than their real practices, or any answer that reflects their behavior.

1.7 Significance of the Study

The finding of this study is significant for female-headed households, academic researchers, policymakers, and non-governmental organizations in Malaysia. The findings of this study contribute in improving the personality, financial capability, financial vulnerability, and life satisfaction among female-headed household in Malaysia. It will enhance the financial situation and the economic issues faced by the female-headed households in Malaysia.

1.7.1 Female-headed Households

The main stakeholders in this study are all the female-headed households as they are the subject of the research and the results implicate their conditions of life. Basically, this study aims to deliver practical suggestions for understanding how money works and how the female-headed households are able to manage and control their personal finances independently to reduce the vulnerability caused by financial mismanagements. Generally, female-headed households are linked with higher emotional distress and depression (Afifi, Cox & Enns, 2006), lower savings, often

running out of money (Mohd & Noor, 2011), and less confidence about their financial futures, knowledge on retirement needs, and about current financial situations (Hira & Loibl, 2009). The results will be able to provide a better understanding on their personality, financial capability, financial vulnerability and life satisfaction, and how these aspects are linked to each other. Hence, appropriate decision-making approaches will be taken by the female-headed households related to their financial aspects in achieving better life satisfaction in life by improving their personality and financial capability. Such improvements will have a lifelong beneficial effect for the female-headed households in reducing levels of debt, accruals, increasing savings, reducing financial dependency and to improve general financial skills. An improved financial status can be achieved and poverty can be reduced gradually among the female-headed households in Malaysia, which also contributes to better life satisfaction.

1.7.2 Policymakers

The outcomes of this study have implications for the policymakers of Malaysia, mainly in the Ministry of Women, Family and Community Development in addressing the issues faced by female-headed households in Malaysia related to finance. One of the core strategies of the Single Women Empowerment Action Plan 2015-2020 developed by the Ministry of Women, Family and Community Development is to uplift the economic conditions of female-headed households in Malaysia by developing financial skills and involvement in entrepreneurship, besides encouraging more research and development and creating an information hub related to female-headed households in Malaysia (Ministry of Women, Family and Community Development, 2014). The current study provides statistical data and information. This study has the potential to fulfil the demands of the Ministry of Women, Family and Community Development by providing statistical data and information on personality, financial capability, financial vulnerability and personal well-being of female-headed households in Malaysia for them to improve existing policies and design new policies related to female-headed households in Malaysia. The ministry is focusing on entrepreneurship, child care, health, basic rights awareness and education of female-headed households in order to empower them (Ministry of Women, Family, and Community Development, 2015). This study provides the ministry several new pillars or variables (personality, financial capability and financial vulnerability) in empowering the female-headed households in Malaysia.

Apart from that, Governmental agencies like the Counselling and Debt Management Agency (AKPK) that provide financial education, financial counselling, and debt management programmes can equip the female-headed households with basic financial management skills. Besides, more effective, targeted programs to the needs of a vulnerable group could encourage the female-headed households to save and invest more. The information provided through this study will be useful for the agency to have a basic idea on the financial problems that female-headed households are going through. Simple financial advice and counselling about saving, investment, interest

rates, debt management, and retirement would help female-headed households plan their finances well and safeguard themselves against financial shocks.

1.7.3 Non-governmental organizations

Non-governmental organisations such as single mother associations hold a bigger responsibility towards the female-headed households by acting as a support system. Through activities and discussions, the female-headed households are being nurtured with knowledge and emotional support in order for them to strive in this society. Most of the time, associations provide emotional support and act as the bridge in getting financial aid from the Government. This study reveals the financial-related problems faced by female headed-households in Malaysia from the perspective of behavioural finance and relates it to life satisfaction. Correspondingly, the findings of this study are relevant to the associations to guide the female-headed households towards better financial capabilities, lower financial vulnerabilities, stronger personalities and life satisfaction through their programs. By encouraging them to be more financially capable and to achieve better financial well-being, the female-headed households could be saved from falling into poverty.

1.8 Definition of Terminology

1.8.1 Female-headed household

Conceptual- Female-headed households are being defined as (1) women who are widowed and the main provider of their household; (2) women who are divorced and have taken custody of childcare; (3) women who do not receive maintenance by the husband to support their children; (4) women who are in the process of divorce; (5) women who have a sick or disabled husband who needs special care; and (6) women who raise other children without a husband's support (A. Idris & Selvaratnam, 2012).

Operational- Female-headed households fall under these three criteria, which are (1) women who are widowed or divorced, separated from their husbands and are the main providers of their households, having children who are not married and living in the same households; (2) women who are the main providers for the family as the husband is incapable of working due to illness, and there are dependent children; (3) women who adopt a child or have a child out of wedlock.

1.8.2 Personality

Conceptual- Personality is the set of psychological traits and mechanisms within the individual that are organized and relatively enduring and that influences his or her interactions with, and adaptations to, the intrapsychic, physical, and social environments (Larsen & Buss, 2005). It is also defined as characteristics of the person

that account for consistent patterns of feelings, thinking, and behaving (Pervin, Cervone & John, 2005).

Operational- Personality in this study refers to the personal traits of female-headed households which consists of locus of control and religiosity, influencing their life satisfaction.

1.8.3 Financial Capability

Conceptual- Financial capability refers to a person's ability in managing and taking control of their finances, demonstrated by a certain level of financial literacy and performance of desirable financial behaviours (Taylor 2011). Meanwhile Xiao, Chen, and Chen, (2014) defined financial capability as the ability to effectively manage economic resources to achieve financial wellbeing.

Operational- Financial capability in this study refers to the ability of a female-headed household's ability to manage and control their finance over four domains, namely, managing money, staying informed, choosing products and planning ahead. Their capability in finance has an impact on their life satisfaction.

1.8.4 Financial Vulnerability

Conceptual- Financial vulnerability is defined as experiencing financial difficulties often or all the time and feeling that their situation is unlikely to improve (Hayes & Finney, 2013). Meanwhile, the European Credit Research Institute (ECRI) and the Personal Finance Research Centre defined financial vulnerability as "the personal feeling of being in a financially unstable situation", and indicated that this 'feeling' is an early indicator of financial stress in households (ECRI & PFRC, 2008).

Operational- Financial vulnerability in this study refers to the instability of female-headed households such as the inability to face monthly expenses and to balance budgets, accruals in paying utility bills, difficulties in shopping for food or paying the rent, and insufficient money when an emergency occurs.

1.8.5 Life Satisfaction

Conceptual- Life satisfaction is also known as subjective well-being defined by a person's evaluative reactions to his or her life, either in terms of cognitive evaluation or ongoing emotional reactions. The individual's judgment is important in the investigation of individual wellbeing, and in the evaluation of the quality of life of societies (Diener, Inglehart, & Tay, 2013).

Operational- Life satisfaction in this study refers to how the female-headed households are evaluating their life based on their life experiences.

1.8.6 Income

Conceptual- Income is the maximum amount that a household, or other unit, can consume without reducing its real net worth (Department of Statistics Malaysia, 2017)

Operational- Income in this study refer to total incomes received (accrued) by members of households, both in cash or in kinds which occur repeatedly. Household incomes below RM1500 fall into the category of relative poverty or widely known as *mudah miskin* (Economic Planning Unit, 2015). Thus, in this study, that those with income below RM 1500 has been categorised as vulnerable household and household income above RM 1500 into non-vulnerable household.

1.8.7 Saving behavior

Conceptual- Saving behavior is defined as the act of not spending money in order to be used in future (Browning & Lusardi, 1996; Warneryd, 1999). In other word, saving behaviour is the combination of perceptions of future needs, a saving decision and a saving action. It is also can be considered as investing, putting money in a bank account, speculating and paying off mortgages (Warneryd, 1999).

Operational- In this study, saving behavior refers to the act of keeping or allocating a part of their income aside for future use. Those who never make savings (0%) will be categorised as non-savers and those with savings 1% above from monthly income are referred as savers.

1.8.8 Debt-to-asset ratio

Conceptual- Debt-to-assets ratio is an indicator of financial leverage. It explains the percentage of total assets that were financed by creditors, liabilities, debt (Deegan, 2013)

Operational- Ratio compares the assets accumulated by an individual against the existing liabilities. In this study, the ratio has been categorised into three which are (i) assets less than debts, (ii) assets equal to debts and (iii) assets more than debts.

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