



**PREDICTORS OF FINANCIAL HARDSHIP AMONG SINGLE MOTHERS IN
PENINSULAR MALAYSIA**

By

FATIN FARWIZAH BINTI MAT RAHIM

**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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Philosophy**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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Financial hardship remains a significant problem among the vulnerable groups, especially single mothers. The financial hardship may be contributed by various factors, including personality traits, materialism, stress and single mothers' behaviours. Therefore, this study investigated the predictors of single mothers' financial hardship related to the conscientiousness trait, materialism, stress, compulsive buying behaviour and savings behaviour. The Resource Management Model of Stress, the Escape Theory and the Prospect Theory was applied as the primary theoretical background of the study. Following that, a conceptual framework was developed to identify the influence of the conscientiousness trait, materialism and stress on single mothers' financial hardship. The conceptual framework also included the mediating effect of compulsive buying behaviour and savings behaviour in the influence of the exogenous variables on single mothers' financial hardship. Additionally, this study examined the moderating effect of income groups to assess the differential effects of income groups on the influence between the exogenous variables and single mothers' financial hardship. Multi-stage random sampling was utilised to collect data from 450 single mothers in four zones in Peninsular Malaysia which is represented by four states, namely Perak, Selangor, Pahang and Melaka. The self-administered questionnaire was distributed to the single mothers through the randomly selected registered single mothers' associations. A total of 407 usable data was retained for further analysis. In this study, the data was statistically analysed for descriptive analysis and Structural Equation Modelling with a relatively good model fit. The findings revealed a significant influence of stress, compulsive buying behaviour and savings behaviour on single mothers' financial hardship. An indirect mediation effect of compulsive buying behaviour was found in the influence of conscientiousness traits and materialism on financial hardship, meanwhile, partial mediation was depicted in the influence of stress on financial hardship. However, no mediation effect of savings behaviour was demonstrated in the influence between the exogenous variables and financial hardship.

Furthermore, a moderation effect of income groups between below hard-core PLI and above hard-core PLI was found in the influence of savings behaviour on financial hardship. This study appeared to support the importance of assessing single mothers' conscientiousness trait, materialism and stress factors, and behaviours that can predict their financial hardship. The empirical evidence suggested a social policy that promotes financial education for single mothers. Furthermore, single mothers should also be educated on stress management in an effort to manage and reduce their stress accordingly. This study also emphasised some research implications and recommendations for future studies of financial hardship and single mothers.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PERAMAL KESULITAN KEWANGAN DALAM KALANGAN IBU TUNGGAL DI SEMENANJUNG MALAYSIA

Oleh

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Kesulitan kewangan adalah satu masalah yang utama dalam kelompok-kelompok rentan, terutamanya dalam kalangan ibu tunggal. Kesulitan kewangan boleh disebabkan oleh faktor-faktor seperti sifat personaliti, materialisme, stres dan gelagat-gelagat dalam kalangan ibu tunggal. Oleh itu, kajian ini mengkaji faktor-faktor peramal kesulitan kewangan ibu tunggal yang berkaitan dengan sifat ketilitian, materialisme, stress, tingkah laku pembelian kompulsif dan tingkah laku menyimpan. Model Pengurusan Sumber semasa Stres, Teori Pengelakkan dan Teori Prospek digunakan sebagai asas teori kajian. Berikutan itu, kerangka konseptual telah dibina untuk mengenal pasti pengaruh sifat ketilitian, materialisme dan stres terhadap kesulitan kewangan ibu tunggal. Kerangka konseptual tersebut juga merangkumi kesan perantaraan tingkah laku pembelian kompulsif dan tingkah laku menyimpan dalam mempengaruhi kesulitan kewangan ibu tunggal. Selain itu, kajian ini mengkaji kesan moderator bagi kumpulan pendapatan untuk menilai kesan perbezaan kumpulan pendapatan dalam pengaruh faktor-faktor peramal terhadap kesulitan kewangan ibu tunggal. Persampelan rawak pelbagai berperingkat digunakan untuk mengumpul data dari 450 ibu tunggal di empat zon di Semenanjung Malaysia yang diwakili oleh empat negeri iaitu Perak, Selangor, Pahang dan Melaka. Soal selidik yang ditadbir sendiri diedarkan kepada ibu tunggal melalui persatuan ibu tunggal berdaftar yang telah dipilih secara rawak. Sebanyak 407 data digunakan untuk analisis lebih lanjut. Dalam kajian ini, data dianalisis secara statistik untuk analisis deskriptif dan Pemodelan Persamaan Struktural dengan kesesuaian model yang tinggi. Hasil kajian menunjukkan terdapat kesan yang signifikan dalam pengaruh stres, tingkah laku membeli secara kompulsif dan tingkah laku menyimpan terhadap kesulitan kewangan ibu tunggal. Kesan perantaraan tidak langsung dari tingkah laku pembelian kompulsif didapati dalam pengaruh sifat ketilitian dan materialisme terhadap kesulitan kewangan, sementara itu, perantaraan separa digambarkan dalam pengaruh stres terhadap kesulitan kewangan. Walau bagaimanapun, tidak ada kesan perantaraan tingkah laku

menyimpan yang ditunjukkan dalam pengaruh antara faktor-faktor peramal dan kesulitan kewangan. Terdapat kesan moderator antara pendapatan bawah garis kemiskinan dan pendapatan atas garis kemiskinan yang dikenalpasti dalam hubungkait antara tingkah laku menyimpan terhadap kesulitan kewangan. Kajian ini menyokong kepentingan menilai faktor sifat ketelitian, materialisme dan stres, serta tingkah laku ibu tunggal yang menentukan kesulitan kewangan mereka. Bukti empirikal, mencadangkan polisi sosial yang menyokong terhadap pendidikan kewangan ibu tunggal. Tambahan lagi, ibu tunggal juga perlu mendapat pendidikan mengenai pengurusan stres agar mereka dapat mengurus serta mengurangkan stres yang dihadapi sewajarnya. Kajian ini juga menekankan beberapa implikasi dan cadangan penyelidikan untuk kajian masa depan mengenai kesulitan ekonomi dan ibu tunggal.



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I ask Allah SWT to accept this work for His sake and to benefit others through it and make it a help for me in the hereafter.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

AIC	Akaike Information Criterion
AGFI	Adjusted Goodness of Fit Index
AMOS	Analysis of Moment Structures
ASV	Average Shared Squared Variance
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Construct Reliability
C.R	Critical Ratio
DOSM	Department of Statistics Malaysia
ECBS-R	Edward Compulsive Buying Scale-Revised
EFA	Exploratory Factor Analysis
EPU	Economic Planning Unit
GDP	Gross Domestic Product
GFI	Goodness-of-fit Index
GOF	Goodness-of-fit
IPIP	International Personality Item Pool
KMO	Kaiser-Meyer-Olkin
MAR	Missing at Random
MCAR	Missing Completely at Random
MI	Modification Index
Mini-IPIP	Mini International Personality Item Pool
MLE	Maximum Likelihood Estimation
MSV	Maximum Shared Squared Variance
NFI	Normed Fix Index
NMAR	Non-ignorable missing at random

OECD	Organization for Economic Co-operation and Development
PCA	Principal Factor Analysis
PLI	Poverty Line Income
PNFI	Parsimonious Normed Fit Index
SD	Standard Deviation
SE	Standard Error
SEM	Structural Equation Modelling
SIE	Standardised Indirect Effect
SPSS	Social Package for Social Science
SRMR	Root Mean Squared Residual
TLI	Tucker-Lewis Index
VIF	Variance Inflation Factor

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Nowadays, the world is facing unprecedented changes in all aspects of life. Technology, politics, climate change and especially the economy are rapidly changing, forcing society to embrace and adapt to it. In the face of such rapid change, it is difficult to fathom which related aspects can immensely affect the population. Previously, the world has typically depended on absolute measures of economics, such as the Gross Domestic Product (GDP).

GDP is the market value of all goods produced within a country over time, assuming that the higher the GDP, the better off the country that produced said goods (Pindyck & Rubinfeld, 2015). The GDP is also used in determining the standard of living of a society in a country which reveals the value of goods and services that a society can experience (Parkin, 2014). In a condition where there is an increase in GDP, it portrays that the economy is performing strongly and the employment rate is expected to increase which then could lead to an increasing amount of consumer spending too (Callen, 2020).

Regardless of its greatness in measuring a country's wealth, the shortcoming of GDP is that it cannot encapsulate the overall social state of being (Stiglitz et al., 2019). In particular, GDP does not distinguish between economic productions that are beneficial to society and those that are harmful to them, and it is challenging to capture inequalities in the distribution of wealth and resources in society. Therefore, it is essential to support the GDP measure with other economic indicators in viewing a country's performance (Smits & Steendijk, 2015; Stiglitz et al., 2019).

Following that, authorities and policymakers in all countries have shifted their focus in alleviating social state of being as part of improving the country's performance. Efforts are made in alleviating social issues such as homelessness, poverty, health issues, unemployment, and education. Additionally, assistance must be provided to groups at high risk of poverty, lack of knowledge, abilities, resources, and need to deal with disadvantages such as those with low income, the elderly, single mothers, children and disabled persons (Nor Fairani et al., 2016). It is also suggested that much attention should be given to specific issues such as the increasing cost of living and deteriorating family institutions (Aisyah et al., 2015; Economic Planning Unit, 2014).

Over the past few decades, single parenting in households has increased significantly and is anticipated to rise even more in the future (OECD, 2011). For instance, in 2013, German families with a dependent child, headed by single parents, reached 20% compared to 14% in 1996. As a matter of fact, over 90% of these households are led by single mothers (Statistisches Bundesamt, 2013). This report proves that the occurrence of single parenthood keeps on increasing, even in a developed country such as Germany. Likewise, other countries such as the United Kingdom and Scandinavian countries also face a similar trend where the majority of single-parent households are fronted by single mothers (Chzhen & Bradshaw, 2012).

Parallel with that, single parents' cases in Malaysia are considered high, and part of it is contributed by the increasing events of divorce. According to the Department of Statistics Malaysia (DOSM), 49,965 divorce cases were reported in 2017 while, 51,642 divorce cases were reported in 2016 (DOSM, 2019). In the period from January to August 2015, a total of 38,035 divorce cases were reported by the Syariah Judiciary Department. Certainly, this statistics disclosure has indirectly depicted changes that occurred in family institutions among Malaysians. The changes that occurred in a family institution could directly affect the household members in various aspects, including psychologically and financially due to the change or loss of the head of the family.

The stressful life events caused by divorce or death of head of household can lead to financial hardship in a household (Ahmad Azrin et al., 2021). A household that has been heavily relied on the father figure for financial support is most likely to encounter financial hardship after the divorce or death, especially when the mother had never been working previously. Additionally, it was posited that households headed by single mothers tend to live in poverty which resulted from various financial hardships that they need to experience after the death or loss of their spouse (Swords et al., 2013).

In Malaysia, it was reported in 2020 that single mothers' labour force participation rate was 49.1% among widows and 76.9% among divorcees (Zarina, 2022), which is considered as high among the single mothers' population. Despite that, the events of poverty or financial hardship experienced by single mothers have been concordantly reported each year (Broussard et al., 2012). This evidence shows that although the single mothers are working for running the household, there could be other factors that could cause them to still face financial hardships such as their nature of employment and income inadequacy (Zarina, 2022), financial practices (Ahmad Azrin et al., 2021; Liwag, 2018), self-coping (Siti Yuliandi et al., 2018) and other psychological factors such as higher stress level and depressive symptoms (Ahmad Azrin et al., 2021; Kim & Kim, 2020). Therefore, much attention needs to be given to single mothers, particularly the efforts in helping them survive and cope with financial vulnerability.

1.2 Problem Statement

Poverty and economic inequality have been acknowledged to cause financial hardship, especially among low-income individuals (Jachimowicz et al., 2020). The effect was driven by the feeling of financially lacking in comparison with the society, which then leads to behaviours that are financially harmful and further prompt the poverty cycle. The financial hardship individuals encountered mainly covers within the context of financial deprivation they experienced due to financial resources inadequacy. The hardship includes difficulty in paying bills and utilities, obtaining necessities such as food and clothes, paying rents or mortgages and indebtedness (Frankham et al., 2020; Western & Tomaszewski, 2016).

Additionally, it was acknowledged that financial hardship caused by overspending and over-indebtedness could eventually lead to poverty (Achtziger, 2022). This evidence has demonstrated the real-world situation of individuals' poverty and financial hardship. Moreover, it also highlighted the factors that could invoke financial hardship. The events of poverty were apparent, especially among single mothers and it was induced by the low incomes they received whether they are working or not (Dayang Suria, 2017; Lu et al., 2020; Nor Aini & Selvaratnam, 2012). Most single mothers in Malaysia faced financial distress due to a lack of monthly income that is less than RM1,000 (Muzalwana et al., 2020; Siti Yuliandi et al., 2017).

Regardless of the income they have received, the household expenditure survey in 2019 revealed that the mean for monthly household consumption expenditure has increased from RM4,033 in 2016 to RM4,534 in 2019 (Department of Statistics Malaysia, 2020). Moreover, the basic necessities remained the largest composition (23.6%) out of the 12 main groups of household consumption expenditure. Evidently, the huge differences between single mothers' monthly incomes that are already low and combined with high household expenditure highlight one of the reasons for single mother's household poverty incidence. Other than that, single mothers in Malaysia were also dealing with other challenges including, emotional and behavioural problems and social stigma (Noraida et al., 2015; Noor Watee et al., 2017). Furthermore, single mothers needed to confront other stressful events such as child custody, workloads, divorce procedures and lack of access to necessities for the family (Noor Watee et al., 2017). In relation to that, single mothers are often described as having a high level of stress, anxiety and impulsivity in decision-making (Stack & Meredith, 2018).

This evidence demonstrated that the financial and psychological stressful events that occurred could affect the single mothers' households and lives, and eventually directs the decision-making they made. Therefore, it is imperative to determine the factors that could directly or indirectly influence the financial hardship encountered by single mothers. Thus, assistance can be offered to

them to handle the household optimally and get the opportunity to improve themselves equally with other women in society. There are several factors that can influence single mothers' financial hardship. Studies have described that demographic factors were some of the predictors of financial hardship among single mothers, including employment, income, educational attainment and living area (Nor Fairani et al., Zarina, 2022). It was posited that it is difficult for the majority of single mothers to get employed especially in formal sectors because of their low educational attainment (Zarina, 2022). Consequently, it impacts their household income and limits the household's ability to financially survive with all of the necessary financial obligations such as paying for utilities and housing rents.

Other than demographic factors, psychological factors were also acknowledged to influence individuals' financial hardship. Some of the psychological factors recognised include personality traits, stress, shame and coping (Frankham et al., 2020; Gladstone et al., 2021). Financial hardship can be predicted through individuals' personality traits. Traits such as neuroticism that mainly about the level of emotional stability (Strus et al., 2017), poor self-control and impulsivity could lead to negative spending behaviour and eventually start the financial difficulties loop (Frankham et al., 2020; Sirgy, 2018). Furthermore, it was asserted that the conscientiousness trait can predict an array of outcomes (Almlund et al., 2011). In specific, the conscientiousness trait is the trait that is closely related to economic outcomes compared to the other personality traits (Parise & Peijnenburg, 2019) such that conscientiousness leads to a better economic outcome.

Pollmann-Schult (2017) has posited that single mothers may portray different personality traits than other women in society. The evidence holds true as single mothers need to overcome the stressful events of divorce or losing a spouse. In facing stressful life events, a change in personality and behaviour can facilitate the single mothers in moving forward in their lives (Baker et al., 2013). Recent studies have found that single mothers are known as resilient individuals in the face of adversities (Caragata et al., 2021; Lee et al., 2022). The resilient trait demonstrates the conscientiousness trait through the act of proper planning, structuring and strength during the calamities (Caragata et al., 2021; Cavanaugh & Blanchard-Fields, 2011). Additionally, the personality traits studies among single mothers were limited and mainly done to observe its impact on children's behaviour (Daryanai et al., 2016; Ghadampour et al., 2020; Indrayanti et al., 2018; Pearson et al., 2018), hence, its impacts on financial hardship in single mothers' household remained inconclusive.

In addition to that, given the current fast-paced global technology, provided with the aim of regular access to the internet for 90% of the population and with the variety of social platforms and e-commerce offered to the society (SME Corporation Malaysia, 2017), it opens up the opportunity for social exchange through social media platforms. Without realising, this borderless connection creates insecurities in individuals' lives, as they continuously compare others'

state of life with theirs. The insecurities resulted from living in a low-income household could prompt individuals to develop a materialistic attitude to compensate for the deprivation they encountered (Trzcinska & Sekscinska, 2021).

Materialism is recognised as one of the individual attitudes where individual values material possessions and it is considered a priority and necessary in life (Richins & Dawson, 1992). Consequently, individuals tend to acquire more and expect to gain happiness through material possessions. Without a doubt, the constant social comparison causes individuals to develop materialism and compulsive buying (Islam et al., 2018; Kamal et al., 2013). Consequently, single mothers' populations could also socially compare themselves with others and become a materialist, especially when their household income and expenditure gap is enormous. This is due to the fact that in a condition where income inequality is high, households have a high tendency to accumulate more goods and display wealth to depict their social status (Jachimowicz et al., 2020). Despite the extensive research on materialism, studies on its impact on financial hardship among single mothers are relatively scarce because most of the focus has been made on finding its influence on individual happiness or subjective well-being (Aknin et al., 2018; Boo et al., 2016; Cheng et al., 2015). Therefore, a study that considers the influence of materialism on single mothers' financial hardship is needed to further explore this association.

Nowadays, aside from money and high living standards, stress and anxiety are also common issues in society. Continuous and accumulated stress and anxiety can lead to a state of depression. Depression is a mental disorder that presents symptoms of stress, anxiety, depressed moods, reduced energy, lack of concentration, guilt, disturbed sleep or loss of appetite (Marcus et al., 2012). This problem can deteriorate individuals' daily activities and performances as well as their well-being in the long term. Many of the suicide occurrences and suicidal attempts were made because of depression. According to the global fact from World Health Organisation (2012), almost one million lives are lost yearly due to suicides caused by depression (Marcus et al., 2012).

Furthermore, the burden of depression is 50% higher for females than males, making the situation more alarming, and actions must be taken (World Health Organisation, 2008). There are numerous factors that can cause depression, such as sleep disorders, hormonal imbalances, substance abuse and stressful life events (Bentley et al., 2014; Sadock et al., 2017). Among all of the factors contributing to individuals' depression, stressful life events are among the most widely examined factors that lead to depression (Assari & Lankarani, 2016). It was acknowledged that single mothers experienced a high level of stress due to the changes that occurred in their lives (Ahmad Azrin et al., 2021; Dayang Suria, 2017; Kim & Kim, 2020; Liang et al., 2018). Therefore, the stress factor is crucial to be investigated, especially among single mothers populations, as they are one of the vulnerable groups that had encountered major life events and prone to get

stressed in an attempt to rebalance their lives after the stressful events of single motherhood.

Stress occurs when individuals deviate from their optimal condition (Staal, 2004). As a result, adaptive behaviour or coping strategy is needed to re-enter the equilibrium state. This is due to the fact that a coping strategy is a psychological effort that individuals use to minimise the impact of stressful events (Lazarus & Folkman, 1984). In an effort to relieve from stressful events, individuals tend to engage themselves in compulsive buying (Zhang et al., 2017). However, compulsive buying behaviour could cause more harm to them, resulting from the accumulated amount of debt and bankruptcy (Zaminor et al., 2015). Despite that, individual compulsive buying behaviour could be influenced by their personality traits, materialism and stress levels (Faber, 2004; Sirgy, 2018). Thus, in this study, compulsive buying behaviour is used to mediate the influence of personality trait, materialism and stress on single mothers' financial hardship.

Economic growth partly depends on citizens' propensity to save because the savings can generate more investments that can influence the capital accumulation and stimulate the economy (Tang, 2010). Despite that, in 2017, Malaysia's household debt to GDP ratio was recorded at 84.6%, which is high compared to nearby developing countries, such as Thailand (78.3%) and China (49.0%) (International Monetary Fund, 2018). It was also reported that the majority of households (83%), especially in Klang Valley, were bound with household debts (Cai et al., 2020). Thus, it portrayed that a high number of households are borrowing to fulfil their expenditure. This economic cycle can be healthy for both the households' standard of living and economic growth. Nonetheless, if household debt increases too rapidly than economic growth, it can also represent an economic vulnerability.

Additionally, Malaysian adults who are reported with high debt used to overspend because of impulse buying and to maintain a lifestyle that they cannot afford. Consequently, they had a low level of savings behaviour (Amer Azlan et al., 2015). Studies also observed that vulnerable groups such as single mothers were lacking in savings for future needs and emergencies (Husniyah et al., 2021; Loibl, 2017; West et al., 2017). This evidence demonstrated that most of the single mothers' population had low savings, but its impact especially on their financial hardship remained inconclusive. Apart from that, other factors such as personality traits, materialism and stress could also influence savings behaviour (Donnelly et al., 2012; Durante & Laran, 2016). Therefore, savings behaviour is used to mediate the influence of personality trait, materialism and stress on single mothers' financial hardship.

Furthermore, individuals' income is also postulated to influence their financial hardship. Income inequalities can stimulate financial hardship faced by individuals (Jachimowicz et al., 2017). Those who live with low income may encounter greater financial hardship compared to those who live with higher

income. For instance, Kim et al. (2015) have examined the association between material hardship and depression in different households. The findings proved that experiencing material hardship is detrimental to mental health, and the magnitude was stronger among single nonelderly and single elderly households of low-income distribution. Moreover, Stack and Meredith (2018) proposed that a study which analyses the impact of psychological distress on financial hardship between different income levels is needed to widen the generalisability of the results (Stack & Meredith, 2018).

In a condition where economic inequalities are apparent, high social comparison and competitiveness drive individuals in engaging wealth accumulation and wealth displays to portray their social status (Jachimowicz et al., 2020). However, the spending pressure becomes a burden especially among low-income households as they struggled to cope with their low incomes. Despite that, among households that are in transition into single parents' households, the low-income households can adapt with the lack of financial resources and lower the impact of financial hardship experienced compared to high-income households (Ryan et al., 2014). This is because the high-income families were used to sufficient financial resources that the changes in family structure becomes a major shock to the households' financial resources and exposed them to financial hardship after the separation. Hence, it shows that the income differences could have a different effect on financial hardship. Concerning that, this study is intrigued to discover the different plausible effects of income groups on single mothers' financial hardship.

This study, therefore, seeks to fill in the void in knowledge as aforementioned by proposing an applicable, reliable and valid conceptual framework of financial hardship. The inclusion of the conscientiousness trait, materialism and stress as predictors of financial hardship along with compulsive buying behaviour and savings behaviour as mediators, while the income groups as a moderator in this study act as a pioneering role in presenting the integrative model in studying the financial hardship of single mothers.

1.3 Research Question

This study is about the influence of conscientiousness, materialism and stress on the financial hardship of single mothers in Peninsular Malaysia. Therefore, this study attempts to answer the following research questions:

1. Is the conscientiousness, materialism, stress, compulsive buying behaviour and savings behaviour influencing financial hardship of single mothers?
2. Are the influences of the conscientiousness, materialism and stress on the financial hardship of single mothers being mediated by compulsive buying behaviour?

3. Are the influences of the conscientiousness, materialism and stress on the financial hardship of single mothers being mediated by savings behaviour?
4. Are the influences of the conscientiousness, materialism and stress, compulsive buying behaviour and savings behaviour on the financial hardship of the single mothers being moderated by income groups?

1.4 Contribution of the Study

The contribution of the study is systematically described in three aspects, namely the theoretical, methodological and practical contribution. The standpoints are discussed below.

1.4.1 Theoretical Contributions

This study has theoretically added to the knowledge through a comprehensive investigation of financial hardship. The issues of single mothers' financial hardship have been investigated from different approaches by previous research. However, there is a lack of empirical research highlighting the factors influencing single mothers' financial hardship, specifically in Malaysia. This study could potentially fill the theoretical gap by offering theoretical justifications for the conceptualisations of the influence of conscientiousness, materialism stress, compulsive buying behaviour and savings behaviour on financial hardship.

For the most part, this study has contributed theoretically by using compulsive buying behaviour and savings behaviour as mediators in the influence of conscientiousness, materialism and stress on financial hardship. It is examined based upon a sound theoretical foundation from the Escape Theory (Faber, 2006), the Prospect Theory (Kahneman & Tversky, 1979) and the Resource Management Model of Stress (Dollahite, 1991). Although the theories and model were used in previous studies, these relationships were examined independently or along with other constructs and suggested that conscientiousness, materialism and stress were among the strongest predictors of compulsive buying (Workman & Paper, 2010).

Similarly, savings behaviour was rarely utilised specifically in financial hardship studies of previous works even though strong associations between materialism, savings behaviour and other aspects of finance such as financial well-being exists. Therefore, examining savings behaviour as a mediator in the influence of conscientiousness, materialism and stress on financial hardship is needed to provide further findings regarding this construct. Hence, by tapping these research gaps and contribute more to the literature, this study could demonstrate the mediating effects of compulsive buying behaviour and savings behaviour in the influence of conscientiousness, materialism and stress on financial hardship.

Apart from that, this study also contributed to the body of knowledge in the family economics and management field. Conceptually, the research framework of this study which consists of the integration of the Resource Management Model of Stress, the Escape Theory and the Prospect Theory, in general, can offer robust findings as it explains the findings based on the combined views of economics, psychology and decision-making. Besides, the integration of a model and theories in this study can help to improve current understanding regarding the associations between conscientiousness, materialism and stress with financial hardship. Additionally, the conceptual framework of this study has introduced the financial hardship variable as the output resulted from the overall interaction of variables within the conceptual framework. Consequently, the financial hardship variable could summarise the results of the interactions between the study variables with the theories and model applied, hence contributes to the study's novelty.

1.4.2 Methodological Contributions

This study has contributed methodologically to the body of knowledge by demonstrating a valid and reliable framework to measure the financial hardship of single mothers. The initial reliability and validity of the model were obtained through the Confirmatory Factor Analysis (CFA) in Structural Equation Modelling (SEM). Additionally, this study has also contributed methodologically through the utilisation of financial hardship as the dependent variable. Previously, most of the family economic studies used absolute indicators such as household income and expenditure (Ma et al., 2020), wealth (Sharma, 2015), education, employment, assets ownership, debts and earnings (Aisyah et al., 2015; Currie & Widom, 2010), GDP (Aisyah et al., 2015), and income poverty (Aassve et al., 2007; Weon & Rothwell, 2017). These indicators, nonetheless, measured economic and financial status based on absolute ownership and economic performances, which can be misleading at times (Stiglitz et al., 2019). Therefore, the present study used financial hardship that was self-assessed by the single mothers themselves to examine their actual state of financial deprivation.

Furthermore, this study contributes to the study of single mothers in Malaysia. In previous studies of financial hardship, the target population was mainly selected among the adolescents (Xu et al., 2017; Xu et al., 2015), immigrants (Saasa et al., 2021), and households (Gjertson, 2016). However, the study of single mothers' financial hardship was insufficient, especially within the Malaysian context. Hence, the present study has contributed more to the studies of the single mothers' population. Additionally, this study also emphasises the importance of assessing factors that can influence single mothers' financial state. Although they were a group of minority in the population, much attention should be given to them to offer solutions to the hardships they experienced.

1.4.3 Practical Contributions

This study aims to present a conceptual framework pertinent to single mothers' financial hardship by considering predicting factors such as conscientiousness, materialism, stress, compulsive buying behaviour and savings behaviour, which might influence their financial hardship. Practically, single mothers' organisations and the ministry may benefit from this study by using it to revise policies and counselling modules by considering the outcome, which is the financial hardship, and the root causes that may affect their financial hardship. In efforts to overcome the single mothers' financial hardship that parallel to the increasing Poverty Line Income in Malaysia, there is a need in revising the financial assistance given to single mothers which suit their needs

Other than that, with a better understanding of the factors influencing single mothers' financial hardship, they may acknowledge that their financial hardship does not get influenced solely by external factors such as the socio-economics factors but also includes individual psychological factors. Single mothers can be much more aware of the impact of their spending behaviour and money behaviour on their financial hardship. Furthermore, the segmentation of the single mothers' population in this study could help the authorities plan and assess further the aspects that can increase the single mothers' standard of living.

Apart from that, this study highlights the importance of recognising financial hardship in single mothers' lives. Previously, much emphasis has been given to the importance of financial well-being (Zarina et al., 2018) and subjective well-being (Octaviani et al., 2018) among single mothers. However, empirical studies and statistical data relating to single mothers' financial hardship are relatively scarce; therefore, this study serves as an overview of the actual situation of financial hardship that single mothers might encounter.

1.5 Research Objectives

The general objective of this study was to examine the factors affecting financial hardship of single mothers in Peninsular Malaysia. Additionally, this study also examined the mediating effect of compulsive buying behaviour and savings behaviour in the influence of conscientiousness, materialism and stress on financial hardship. The moderating effect of income groups was also assessed on financial hardship.

Specifically, the objectives of this study were established as below:

1. To ascertain the influence of conscientiousness, materialism, stress, compulsive buying behaviour and savings behaviour on the financial hardship of single mothers.
2. To assess the mediating effect of compulsive buying behaviour in the influence of conscientiousness, materialism, stress on the financial hardship of single mothers.
3. To assess the mediating effect of savings behaviour in the influence of conscientiousness, materialism, stress on the financial hardship of single mothers.
4. To assess the moderating effects of income groups in the influence of conscientiousness, materialism, stress, compulsive buying behaviour and savings behaviour on the financial hardship of single mothers.

1.6 Definition of Terms

The following subsection is the terms defined in this study:

1.6.1 Conscientiousness

Conceptual Definition

The personality trait is individual differences and distinguishable behaviours that make the personality traits of individuals unique from one individual to the other. Additionally, the conscientiousness trait reflects individual's orderliness, goal-achieving and self-discipline (Costa & McCrae, 1992).

Operational Definition

The conscientiousness was assessed using four conscientiousness items from the Mini International Personality Item Pool (Mini-IPIP) scale (Milfont & Sibley, 2012).

1.6.2 Materialism

Conceptual Definition

Materialism is the extent to which individuals seek to engage in the development and maintenance of self through the acquisition and use of products, services, experiences or relationships that provide desirable symbolic value. (Richins & Dawson, 1992; Shrum et al., 2013).

Operational Definition

Materialism was examined based on Richins (2004) short version of the Material Values Scale, which measured single mothers' values and interpretations on the success of others and oneself through the acquisition of goods and services, centrality of the acquisition of goods and services in individuals' life and belief that the acquisition can lead to happiness.

1.6.3 Stress

Conceptual Definition

Stress is the environment that individuals judge as threatening or overwhelming to their resources and well-being (Lazarus & Folkman, 1984).

Operational Definition

Stress was measured by the degree to which single mothers' previous month life events that experienced as stressful by using the Perceived Stress Scale-10, developed by Cohen and Williamson (1988). This scale measured perceived stress according to the level of stress experienced as a function of objective stressful events and coping processes (Al-Dubai et al., 2012).

1.6.4 Compulsive Buying Behaviour

Conceptual Definition

Compulsive buying is the urge to buy that is impossible to resist, individuals' uncontrollable buying behaviour, and excessive buying despite the negative consequences on their personal, social and financial health (Dittmar, 2004).

Operational Definition

Compulsive buying behaviour was examined based on the Edwards Compulsive Buying Scale-Revised (ECBS-R) developed by Edwards (1993). It measured compulsive buying behaviour based on five aspects which are the tendency to spend, drive to spend, feelings about shopping and spending, dysfunctional spending and post-purchase guilt.

1.6.5 Savings Behaviour

Conceptual Definition

Individual adaptive strategies to cope with future financial uncertainties through purposeful acts to protect their finances during emergencies and for future consumption (Katona, 1975; Van Raaij, 2016).

Operational Definition

Savings behaviour was defined as single mothers' propensity to save based on different saving motives, including saving as precaution motive (short-term goals, long-term goals and emergency) and future motive (retirement). It was measured based on the scale items developed by Hilgert and Hogarth (2003) and Hogarth and Anguelov (2004).

1.6.6 Financial Hardship

Conceptual Definition

Financial hardship is the extent in which, individuals experience deprivation because of limited financial resources and lack of necessities (Mack & Lansley, 1985).

Operational Definition

In this study, financial hardship was measured based on the single mothers' self-assessed frequency of experiencing financial hardship related to living conditions such as difficulty paying bills, utilities, mortgage, affording suitable housing and necessities throughout the previous months (Western & Tomaszewski, 2016).

1.6.7 Single Mothers

Conceptual Definition

In the Malaysian context, single mothers are defined as (1) female-headed household that is divorced or widowed with a dependent child, (2) mothers who are breadwinners for the family with dependent children and husbands who are disabled, bedridden or unable to work, (3) divorced women with an adopted child or having children out of wedlock (Ministry of Women, Family and Community Development, 2015).

Operational definition

Single mothers are members of single mothers' organisations registered under the Ministry of Women, Family and Community Development. In this study, the single mothers are those in the working-age between 18 and 65 years.

1.7 Scope and Limitation of the Study

This study evolved around the topic of financial hardship faced by single mothers. The financial hardship covers mainly on the frequency of deprivation they encountered in paying for utilities, housing rents or mortgages,

indebtedness, and needing assistance either financial or goods from the government or non-government organisations.

The respondents of this study were 450 single mothers from different registered single mothers' associations in four states namely, Selangor, Pahang, Perak and Melaka. Each of the states represents the four different geographical zones in Peninsular Malaysia. Due to the financial and time constraints, only the selected single mothers' association was chosen for the study. With the aim of achieving true representation of single mothers according to the definition of single mothers set by the Ministry of Women, Family and Community Development, only single mothers' associations registered under the ministry were selected. Therefore, single mothers in this study include divorcees, widows, and women attending to a sick husband.

Despite the respondents surveyed in this study were considered statistically sufficient for a study in Peninsular Malaysia, the generalisation to the whole population in other states that were not included in this study is not warranted. Although the sample size makes it impossible to generalise the findings to the whole single mothers' population in Malaysia, it delivers imperative information regarding factors that can influence the single mothers' financial hardship. Other factors such as financial literacy, employment and self-esteem, which may also influence financial hardship, are possible. This study focused on conscientiousness, materialism, stress, compulsive buying behaviour and savings behaviour because the investigation of financial hardship especially among single mothers is less visited thus far.

1.8 Organisation of the Thesis

In this chapter, the background of this study is explained, starting from the world situation to the narrowed down Malaysia's current state of financial hardship. The problem statement served as the reference issues in this research was discussed accordingly, and the research questions of this study were further clarified. Additionally, the theoretical, methodological and practical contribution of this study and the research objectives were discussed. The definition of terms specifically used in this study was elucidated accordingly and the scope and limitation of this study was described.

The subsequent chapters of this thesis discuss the literature reviews, methodology, findings and discussions, also the summary, conclusion and recommendations for future studies. Chapter Two discusses the theoretical foundation of this study. This chapter also explores in detail the influence of the exogenous variables and endogenous variable included in the conceptual framework. Additionally, this chapter explains the possible mediation effect of compulsive buying behaviour and savings behaviour and the moderation effect of income groups. Besides that, this chapter also depicts the conceptual

framework applied in this study and ends with the hypotheses that were developed parallel to the research objectives.

Chapter Three outlines the methodology applied in this study. This chapter discusses the research design and sampling method used in this study. Apart from that, this chapter also imparts the data collection process of this study. Additionally, this chapter provides the measurements of variables utilised in this study. Subsequently, this chapter presents the pilot study conducted prior to collecting the actual data, also the exploratory data analysis conducted on the raw data after it was collected. This chapter ends with data analyses techniques conducted for this study.

Chapter Four offers the socio-demographic and socio-economic information relating to the respondents of this study along with the descriptive analysis. Then, this chapter also presents the structural model and discusses the influence between the exogenous variables on the endogenous variable. This chapter ends with discussions on the mediation effects and moderation effects of this study.

Chapter Five imparts the summary, conclusions and recommendations for future studies. This chapter summarises the main findings and discussions of this study. This chapter also outlines the results of hypotheses based on the findings of this study. Additionally, this chapter provides conclusions for the research objectives based on the results of this study. Finally, this chapter ends with discussing recommendations that future studies should consider in their studies.

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