



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



## Economic Well-being among Single Mothers: The Effects of Materialism, Stress, Savings Behaviour and Compulsive Buying Behaviour

Fatin Farwizah Mat Rahim, Husniyah Abd Rahim, Syuhaily Osman, Mohd Amim Othman

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i10/14309> DOI:10.6007/IJARBSS/v12-i10/14309

**Received:** 19 August 2022, **Revised:** 21 September 2022, **Accepted:** 30 September 2022

**Published Online:** 11 October 2022

**In-Text Citation:** (Rahim et al., 2022)

**To Cite this Article:** Rahim, F. F. M., Rahim, H. A., Osman, S., & Othman, M. A. (2022). Economic Well-being among Single Mothers: The Effects of Materialism, Stress, Savings Behaviour and Compulsive Buying Behaviour. *International Journal of Academic Research in Business and Social Sciences*, 12(10), 1034 – 1055.

**Copyright:** © 2022 The Author(s)

Published by Human Resource Management Academic Research Society ([www.hrmars.com](http://www.hrmars.com))

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen

at: <http://creativecommons.org/licenses/by/4.0/legalcode>

**Vol. 12, No. 10, 2022, Pg. 1034 – 1055**

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at  
<http://hrmars.com/index.php/pages/detail/publication-ethics>



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



[www.hrmars.com](http://www.hrmars.com)

ISSN: 2222-6990

## Economic Well-being among Single Mothers: The Effects of Materialism, Stress, Savings Behaviour and Compulsive Buying Behaviour

Fatin Farwizah Mat Rahim

Department of Resource Management and Consumer Studies, Faculty of Human Ecology  
Universiti Putra Malaysia 43400 UPM Serdang Selangor, Malaysia.

Corresponding Author's Email: [fatinfarwizahmatrahim@gmail.com](mailto:fatinfarwizahmatrahim@gmail.com)

Husniyah Abd Rahim, Syuhaily Osman & Mohd Amim Othman

Department of Resource Management and Consumer Studies, Faculty of Human Ecology,  
Universiti Putra Malaysia

### Abstract

Economic growth has often been measured by income and productivity. The rise of the highly commercialised modern world has opened up the possibilities to look beyond numbers and introduced the concept of well-being in measuring a country's performance. Efforts should be made especially among the vulnerable groups of population to ensure equal growth of the economic well-being. Single mothers often deal with economic, financial and psychological issues that make them much vulnerable to the dynamic movement of the economics. Therefore, this study aims to examine the effects of materialism, stress, savings behaviour and compulsive buying behaviour with single mothers' economic well-being. The sample was selected by using a multi-stage random sampling which conducted among single mothers in Peninsular Malaysia. Results divulged that stress and compulsive buying behaviour had a significant negative influence on economic well-being. Additionally, compulsive buying behaviour had mediated the influence of materialism and stress on economic well-being. These findings suggest that managing the factor of materialism, stress and compulsive buying behaviour is crucial in alleviating the economic well-being of the single mothers. Further implications and suggestions for future research are also discussed accordingly.

**Keywords:** Materialism, Stress, Savings Behaviour, Compulsive Buying Behaviour, Economic Well-Being

### Introduction

Current macroeconomic volatility and political instability have indirectly affected consumer saving and spending activities. The economic hardships and social disadvantages among single mothers are well-known (Organization for Economic Cooperation and Development, 2014) contributed by a higher cost of living especially among single mother households with several

dependents and work roles. Therefore, households led by single mothers oftentimes need to deal with monetary issues. The negative associations between stress and materialism with single mothers' well-being have been well researched especially in the Western countries (Aassve et al., 2007; Stack & Meredith, 2018; Zhan & Pandey, 2004) which highlights the importance of including stress and materialism factors in assessing individual's well-being.

Well-being is understanding individuals' ability to cope with changes and the levels of well-being affected after the changes occur (Headey & Wearing, 1992). In addition to that, Kahneman et al. (1998) defined well-being by describing individuals' state of mind and their expressed subjective assessments of their own emotions and quality of life. However, the concept of well-being can also be described by examining the objective aspects of it. This view states a list of prudential goods and believes that well-being is made up by the presence of these goods in individuals' lives. This view is supported by studies of well-being by (Finnis, 2011; Fletcher, 2013).

Joo (2008) posited that within the field of family economic well-being, the concept of economic well-being can be used interchangeably with financial well-being and material well-being (Xiao, 2013). Although it was reported that the economic well-being term is interchangeable with financial well-being and material well-being, there are slight differences in the definition for each of it. For an instance, Salignac et al (2019) suggested that financial well-being is best defined based on individuals' financial capabilities and financial status (Joo, 2008; Porter & Garman, 1993). Meanwhile, material well-being is the umbrella concept that includes various concepts such as satisfaction with material possession, satisfaction with standard of living, financial stress and financial satisfaction (Sirgy, 2018). Since financial well-being emphasises much on the monetary aspects, meanwhile the material well-being concept is too broad, to begin with, therefore the concept of economic well-being is the most suitable term to be used in this study.

Malaysia offers a significant case in examining theories in studying single mothers' population given with the unique multi-racial population. The occurrence of single mothers in Malaysia is mainly contributed by the amount of divorce rate and the trend is similar in other Asian countries such as Japan (Nonoyama-Tarumi, 2017; Zarina & Kamil, 2012). Conversely, the trend is different in the United States where the principal factor for single motherhood is caused by the increasing number of non-marital births (Nonoyama-Tarumi, 2017). The differences in the trend between Asian countries and Western countries might be explained due to cultural differences of the two as non-marital childbirth is uncommon in most of the Asian countries.

Malaysian statistics revealed that the existence of single mothers counted of nearly 235,000 which is about 1.7% of the total population in Malaysia. Besides, the single mothers were mainly Malays (66%), Indian (12%) and Chinese (9%), meanwhile, the existence of single mothers were the least for Sarawak origins which counted for 2% out of the single mothers' population (Ministry of Women, Family and Community Development, 2015). It was estimated that this number will keep on increasing in the future (Evans, 2011). However, the prevalent rate of single parenthood in Malaysia is considerably low in comparison with other countries of the world. For instance, single parents in Germany counted for 20% (Statistisches Bundesamt, 2013), the United States (25.8%), the United Kingdom (21.5%), Denmark (30%), meanwhile Japan (12.3%) (Organization for Economic Cooperation and Development (OECD), 2011).

## Literature Review

### *Single Mothers' Issues in Malaysia*

Little is known about single mothers' economic well-being in Malaysia. The poverty issue remains in the society especially among single mothers which are part of the vulnerable group population (Idris & Selvaratnam, 2012). Therefore, much of public attention in Malaysia is needed that focusing on the vulnerable group given with their impoverished status. Single mothers with low incomes are one of the factors that cause poverty among single mothers in Malaysia (Idris & Selvaratnam, 2012; Mulia, 2017; Roddin et al., 2011). Hence, most of them are facing financial strain because of the low monthly incomes (Ahmad et al., 2017; Hamid & Salleh, 2013). Other than that, single mothers also facing employment problem because of their limited ability and skills to compete with other women in the workforce (Omar et al., 2014). In addition, it was revealed that most of them were having education until the primary level only. Thus, making employment opportunity more limited for them (Ahmad & Ismail, 2010). Without realising, these factors also cause inequalities between single mothers with other female population.

Apart from poverty issues, single mothers in Malaysia were also found dealing with other economic and financial issues, emotional and psychological problems, parenting problems and social stigma (Ahmad & Ismail, 2010; Endut et al., 2015; Evans, 2011; Ghani & Aziz, 2013; Hamid & Salleh, 2013; Roddin et al., 2011). The evidence of problems occurred among single mothers are definite, but the situation can be changed following on how they cope and handle the situation at hands. For example, single mothers with low income, but practising savings behaviour can have better economic well-being. In contrast, single mothers who practising poor money behaviour would find themselves with lower economic well-being, regardless of receiving higher income. Grounded on these premises, this study attempts to provide new insight into economic well-being by examining the influence of materialism, stress, savings behaviour, compulsive buying behaviour and economic well-being among the single mothers. Additionally, this study also aims to assess the mediation effect of compulsive buying behaviour in the influence of materialism, stress and savings behaviour on the economic well-being of the single mothers.

### **Stress, Materialism, Savings Behaviour Compulsive Buying Behaviour and Economic Well-Being**

In relation to the relatively scarce research on economic well-being in Malaysia, this study is made based on the conceptual framework from international published researches that are related to the economic well-being of single mothers. Well-being is the general term used that covers how well individuals are doing in life which include social, subjective, health and material dimensions (Kitayama & Markus, 2000; Searle, 2008). In particular, previous studies have been interchangeably used the economic well-being term with material well-being and financial well-being (Joo, 2008). In this study, economic well-being is defined as material living conditions which determine an individual's consumption possibilities and their knowledge on resources (OECD, 2013).

Materialism is the extent in which individuals seek to engage in the development and maintenance of self through acquisition and use of products, services, experiences or relationships that are believed to be able to give desirable symbolic value (Shrum et al., 2013). In other words, individuals with a high level of materialism give much importance to the acquisition of goods and services to represent themselves. The previous study in Iceland had discovered that materialism can negatively affect individuals' well-being (Gardarsdottir &

Dittmar, 2012). Similarly, it was revealed that materialism reduces well-being among Turkish adult sample (Karabati & Cemalcilar, 2010). A similar trend was also found in a study among the United States citizens (Manolis & Roberts, 2012). In addition, some researches linked materialism with compulsive buying behaviour (Manolis & Roberts, 2012; Mueller et al., 2011; Villardefrancos & Otero-Lopez, 2016) and other researches that linked compulsive buying behaviour with well-being (Zhang et al., 2017; Gardarsdottir & Dittmar, 2012; Gutter & Copur, 2011). The evidence of materialism is detrimental to well-being is clear however, the systems underlying this association remained partially unexplained (Gornik-Durose, 2020).

Apart from that, given with the pressure to rebalance the family while being the sole-breadwinner, single mothers oftentimes were reported dealing with stress. The increase prevalent rate of suicide because of depression (World Health Organization, 2012) makes the situation more alarming, especially for single mothers. Moreover, the occurrence of single motherhood itself might also cause compulsive behaviours as disclosed by Baker et al. (2013), which revealed that family disruption has indirect effect with compulsive buying behaviour. Thus, it shows that any form of stress can affect compulsive buying behaviour in any ways. It was also discovered that there were positive associations between stress and compulsive buying behaviour (Baker et al., 2016; Muller et al., 2012; Singh & Nayak, 2015). Additionally, the negative influence of stress on individuals' well-being was found in a study by Abolghasemi and Varaniyab (2010), however, the study was conducted in the context of life satisfaction among students sample. In a different study by Kozka and Przybyla-Basista (2016) also found the negative effect of stress, however on the psychological well-being of the parents of children with special needs.

Other than the materialism and stress factor, savings behaviour could also influence economic well-being. In a study of the United Nation countries posited that financial practices especially saving is crucial in alleviating the well-being, although they were currently residing in less fortunate societies (Martin & Hill, 2015). Parallel to that, a study of Dutch household in assessing the influence of happiness or life satisfaction in consumption and savings behaviour highlighted that those who are satisfied with life tend to save more, spend less and future-oriented in their decision making (Guyen, 2012). The studies of Guven (2012) and Martin and Hill (2015) had covered the savings behaviour in the household context. In a recent study by Sabri et al (2020), which examined the financial well-being of working women in Malaysia revealed that Malaysian working women had practised good financial management practices given with their good practices in savings and investment activities.

According to the previous researches and findings, hence this study hypothesised that;

**H1:** *Materialism has a significant negative influence on the economic well-being of single mothers.*

**H2:** *Stress has a significant negative influence on the economic well-being of single mothers.*

**H3:** *Savings behaviour has a significant positive influence on the economic well-being of single mothers.*

**H4:** *Compulsive buying behaviour has a significant negative influence on the economic well-being of single mothers.*

**H5a:** *Compulsive buying behaviour mediates the influence of materialism on the economic well-being of single mothers.*

**H5b:** *Compulsive buying behaviour mediates the influence of stress on the economic well-being of single mothers.*

**H5c:** *Compulsive buying behaviour mediates the influence of savings behaviour on the economic well-being of single mothers.*

### ***Compulsive Buying Behaviour and The Escape Theory***

Compulsive buying is a severe and repetitive spending behaviour that causes by negative emotions or events that individuals have encountered (Faber, 2006). It acts as a means to escape from anxiety, depression, anger, pain and stress (O'Guinn & Faber, 1989). Additionally, in alleviating oneself, individuals also use compulsive buying behaviour as a coping strategy to relieve from stressful events (Zhang et al., 2017). In contrast, compulsive buying behaviour brings more harm to them given with the increasing amount of debt and bankruptcy (Zamzamin et al., 2015). Although there is no clear evidence of compulsive buying behaviour among single mothers, it is apparent that they have all of the possibilities that might cause them to develop compulsive buying behaviour. However, as far as this study acknowledges, none of the previous studies has tapped the area where single mothers might have compulsive buying behaviour that eventually can affect their economic well-being.

Accordingly, this study is based on the Escape theory (Faber, 2006). The Escape theory is used to explain human behaviours such as suicide, addiction, compulsive buying and binge eating. This theory also posited that individuals do not consider the negative consequences of their behaviour because their main focus is to alleviate the negative feelings at that particular point of time. The Escape theory is the most suitable theory to be used in explaining compulsive behaviour and reasons individuals engage in it (Faber, 2006). Previously, this theory has been used in studies of compulsive buying (Bonfanti et al., 2010), binge eating (Yi, 2012), alcoholism and substance abuse (Kwak et al., 2004). Therefore, this study utilised the Escape theory as the theoretical foundation in explaining the mediation effect of compulsive buying behaviour in the influence of materialism, stress, savings behaviour with economic well-being.

## **Methodology**

### **Sample and Sampling Procedures**

This study was conducted using a cross-sectional design and the survey method was chosen because of its ability to collect direct answers from respondents, namely the single mothers. The study sample of population consists of single mothers in Peninsular Malaysia. The sample consisted of single mothers that fulfil either of the three criteria, namely (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).

Multi-stage random sampling was employed to sample 450 single mothers from 235,000 registered numbers of single mothers in Malaysia. The population of the single mothers was segmented into subpopulation based on the single mothers' associations registered with the Ministry of Women, Family and Community Development in each state located in Peninsular Malaysia. Firstly, the states in Peninsular Malaysia were grouped based on the geographical regions which divided into four zones. The four zones in Peninsular Malaysia consists of the north, south, centre and east coast regions. The northern region comprises the states of Perlis, Kedah, Penang and Perak; the central region comprises of Selangor, federal territories of Kuala Lumpur and federal territories of Putrajaya; the east coast region comprises the state of Kelantan, Terengganu and Pahang; southern region comprises the states of Negeri Sembilan, Melaka and Johor.

At the second stage, a state in each zone was randomly selected and the selected states were Perak (north), Selangor (centre), Pahang (east) and Melaka (south). The number of

samples required in each targeted state was based on the single mothers' population in that state. Hence, Perak had 102 respondents, Selangor had 225 respondents, Pahang had 50 respondents and Melaka had 73 respondents. At the third stage, single mothers' associations were randomly chosen based on the list of the associations in each selected state. Out of the 450 respondents, 407 cases were validated to be further analysed.

### ***Dependent Variable***

This study examined the indicator of economic well-being: financial hardships. It was measured by using an instrument adapted from a study by Western and Tomaszewski (2016). The items measured the individual's ability to fulfil end meets with reversed scores that demonstrated higher scores indicated less hardship and better economic well-being based on the seven-point Likert scale ranges 1 (*never*) to 7 (*always*).

### ***Measuring Materialism***

Materialism was defined as the extent to which individuals seek to occupy in the development of self through the acquisition of products, services or experiences which considered as able to provide personal symbolic value (Shrum et al., 2013). In this study, materialism was examined using the Material Values Scale (MVS) by Richins (2004). The scale measured individuals' judgments toward the success of others and oneself through the acquisition of goods and services, centrality of that acquisition in one's life and belief that the acquisition of such goods and services can provide happiness. The instrument consisted of nine items with a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) which denoted high materialism for higher scores.

### ***Measuring Stress***

Stress was measured by adapting the Perceived Stress Scale 10 (PSS-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, coping processes and personality factors (Al-Dubai et al., 2012). The selected items were measured by using the seven-point Likert scale of 1 (*never*) to 7 (*always*) that demonstrated a high level of stress for higher scores.

### ***Measuring Savings Behaviour***

The savings behaviour was assessed by adopting four items of savings behaviour from (Hilgert and Hogarth, 2003; Hogarth and Anguelov, 2004). The selected items were measured by using the seven-point Likert scale of 1 (*never*) to 7 (*always*) that indicated better savings behaviour for higher scores.

### ***Measuring Compulsive Buying Behaviour***

In this study, compulsive buying behaviour is defined as an urge to buy that is impossible to resist, uncontrollable and excessive buying (Dittmar, 2004). The compulsive buying behaviour was assessed by adopting the Edwards Compulsive Buying Scale-Revised (ECB-R) from (Maraz et al., 2015). It consists of 16-items revised from the original 29 items developed by Edwards (1993) to measure respondents' tendency to spend, compulsion to spend, feelings about shopping and spending, dysfunctional spending and post-purchase guilt. In accordance with the objective of this study in determining the mediating effect of compulsive buying behaviour in the influence of materialism, stress and savings behaviour on the economic well-being, this variable acts as the mediating factor within the study framework.

**Data Analytic Approach and Procedure**

Structural equation modelling (SEM) was used to determine the relationships between single mothers' materialism, stress, savings behaviour, compulsive buying behaviour and economic well-being. SEM is a powerful statistical method which able to assess the influence of the exogenous variables on the endogenous variable graphically. SEM is suitable for mediation analysis given with its capability to examine multiple paths with numerous predictors, mediators and outcome variable simultaneously. Therefore, in this study, the SEM analysis served for several purposes include conducting Confirmatory Factor Analysis (CFA) of the measurement model, to test the structural model fit, to determine the influence of the exogenous variables on the endogenous variable, also to assess the bootstrap mediation effect of compulsive buying behaviour in the influence of materialism, stress and savings behaviour on economic well-being.

Goodness-of-Fit indices were used to determine the overall fit of the hypothesised model. In other words, it assessed how well the model able to represent the underlying theories (Ho, 2006). Hair et al (1995); Cunningham et al (2006) suggested the use of at least three fit indices by including at least one index from each category of model fit, namely the absolute fit, incremental fit and parsimonious fit. Thus, the model resulted in this study were evaluated based on the recommended fit indices criteria by Lei and Lomax (2005); Hair et al (2010); Cunningham et al (2006); Jaccard and Wan (1996) with acceptable thresholds as follows:  $\chi^2/df \leq 5.0$ , RMSEA  $\leq 0.08$ , TLI, NFI and CFI  $\geq 0.90$ . Prior to estimating and evaluating SEM analysis, the confirmatory factor analysis (CFA) and measurement model of the latent variables were tested.

The first step was conducted to examine the measurement model as in Figure 1. As can be seen, three out of nine items for measuring materialism was retained which comprises the items in the happiness dimension. Other than that, five out of ten items and four out of sixteen items were retained in measuring stress and compulsive buying behaviour. Additionally, three of the four items in measuring the savings behaviour were retained in the measurement model. Meanwhile, in measuring economic well-being, four out of five items were retained. The measurement model depicts a satisfactory model fit with values of RMSEA = 0.058, CFI = 0.946, NFI = 0.912, TLI = 0.936,  $\chi^2/df = 2.373$ . All of the GOF indices demonstrate acceptable value where the relative chi-square and RMSEA were lower than 5.0 and 0.08 threshold respectively. Meanwhile, the CFI, NFI and TLI value had successfully surpassed the 0.9 thresholds.



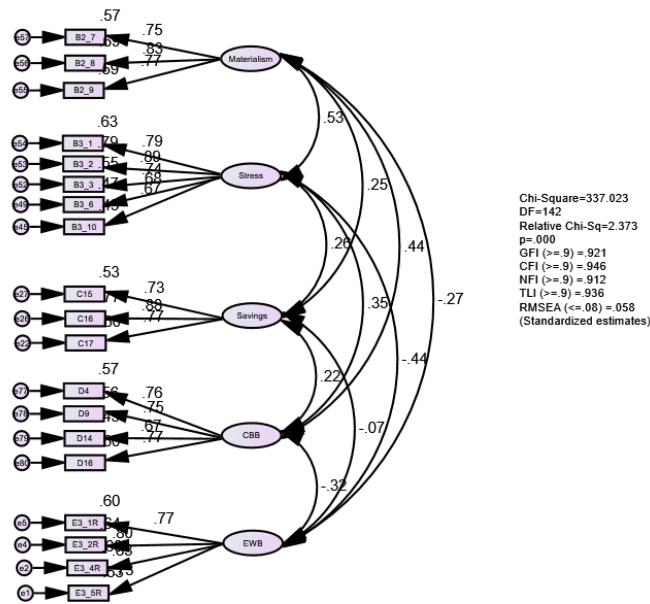


FIGURE 1. The measurement model

The results of validity which assessed the average variance extracted (AVE) and composite reliability (CR) of the constructs are shown in Table 1. The AVE values should be more than 0.5 for the validity to be accepted (Awang et al., 2015). Referring to Table 1, it shows the AVE with value ranges from 0.547 to 0.634. Therefore, the AVE for this study was accepted because all of the values exceeded the minimum of 0.5 thresholds (Hair et al., 2010). On the other hand, according to Awang et al (2015), the value of composite reliability (CR) should be larger than 0.6 in order to be accepted. Table 1 shows that the CR value ranges from 0.828 to 0.871, hence the CR was achieved because all of the values exceeded the minimum threshold of 0.6.

Table 1

*The Validity*

Construct/measure	Loading
<b>Materialism (AVE = 0.617, CR = 0.828)</b>	
My life would be better if I owned certain things I don't have (B2_7)	0.752
I'd be happier if I could afford to buy more things (B2_8)	0.833
It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like. (B2_9)	0.769
<b>Stress (AVE = 0.577, CR = 0.871)</b>	
In the last month, how often have you been upset because of something that happened unexpectedly? (B3_1)	0.792
In the last month, how often have you felt that you were unable to control the important things in your life? (B3_2)	0.891
In the last month, how often have you felt nervous and "stressed"? (B3_3)	0.743
In the last month, how often have you found that you could not cope with all the things that you had to do? (B3_6)	0.682
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? (B3_10)	0.669
<b>Savings behaviour (AVE = 0.634, CR = 0.838)</b>	
Save for emergency fund (C15)	0.728
Save for long-term goals out of each salary such as child education, home (C16)	0.880
Save for retirement (C17)	0.773
<b>Compulsive buying behaviour (AVE = 0.547, CR = 0.828)</b>	
I feel 'high' when I go on a buying spree (D4)	0.756
I go on a buying binge when I'm upset, disappointed, depressed or angry (D9)	0.751
I buy things I don't need or won't use (D14)	0.674
Many of the things I buy are never worn or used (D16)	0.774
<b>Economic well-being (AVE = 0.612, CR = 0.863)</b>	
Could not keep up with payments for water, electricity or telephone (E3_1R)	0.774
Got behind with the rent or mortgage (E3_2R)	0.797
Had to pawn or sell something, or borrow money from a money lender (E3_4R)	0.826
Had to ask a welfare agency for food, clothes, accommodation or money (E3_5R)	0.728

**Results and Discussion****Demographic Profile of the Respondents**

Table 2 shows the result of the descriptive analysis. The result reveals that the median age was 54 years old with almost half of the single mother respondents were middle-aged (47.9%) and about 8.1% were young adults. Apart from that, the majority of the respondents were Malay (91.6%) followed by Indian (6.1%) and Chinese (1.7%). The variation of ethnicity among single mothers were also depicted among single mothers in a multi-ethnicity country such as the United States in which majority of them were African American, non-Hispanic followed by Hispanic and White, non-Hispanic (Barnhart & Maguire-Jack, 2016). Apart from that, more than half or approximately 56% of the single mother respondents had secondary level of education as the highest education background, whereas only a few of them had a tertiary level of education. In addition, the result also shows that majority of the respondents (57.0%) were widowed. Meanwhile, 7.9% of them were reported with other reasons for being a single

mother including abandonment by the spouse or living with a disabled spouse. Furthermore, the profile also reveals about half of the respondents (49.3%) had debt value greater than the asset value.

Table 2

*Profile of the single mother respondents (n = 407)*

Respondent's background	socio-demographic	Frequency	Percentage (%)
<i>Age</i>			
18 – 35		33	8.1
36 – 55		195	47.9
56 and older		179	44.0
Median	54		
<i>Ethnicity</i>			
Malay		373	91.6
Chinese		7	1.7
Indian		25	6.1
Others		2	0.5
<i>Highest education background</i>			
Primary education		152	37.4
Secondary education		227	55.7
Tertiary education		28	6.9
<i>Reason of single-motherhood</i>			
Widow		232	57.0
Divorcee		143	35.1
Others		32	7.9
<i>Current financial status</i>			
Asset less than debt		201	49.3
Asset equal to debt		126	31.0
Asset more than debt		80	19.7

**The Structural Model**

In assessing the direct influence of the exogenous variables toward economic well-being, the structural equation modelling was utilised. Figure 2 depicts the full direct structural model with exceptional model fit (RMSEA = 0.058, CFI = 0.946, NFI = 0.912, TLI = 0.936 and  $\chi^2/df = 2.373$ ). The Goodness-Of-Fit (GOF) indices showed that the absolute fit represented by the RMSEA value indicated a satisfactory fit with lower than the maximum threshold of 0.08. Additionally, all of the incremental fit (CFI, NFI and TLI) value also had successfully surpassed the minimum threshold of 0.9. Furthermore, the relative chi-square also indicated an exceptional fit with a value below than 5.0. Thus, it depicted that the model had fitted the data exceptionally given that it had fulfilled the requirement of at least an index from each GOF category. Additionally, Figure 2 also reveals that 23% of the variance in the economic well-being was explained by the materialism, stress, savings and compulsive buying behaviour.

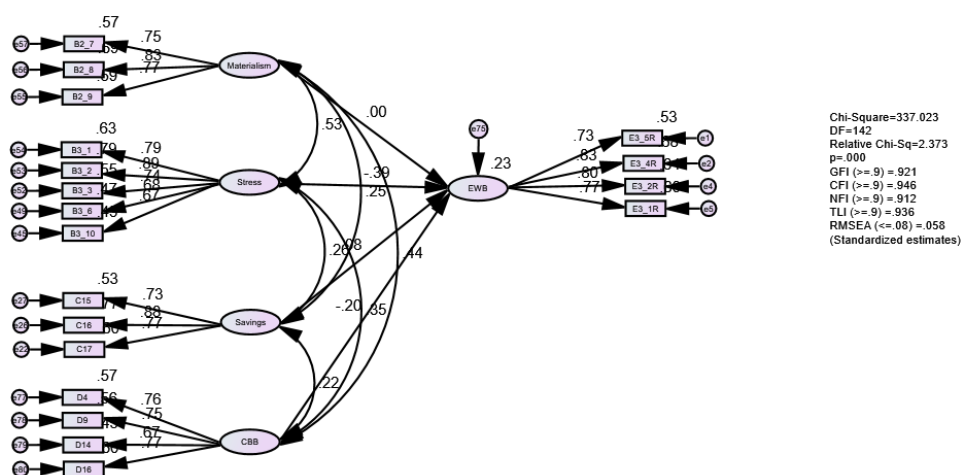


FIGURE 2. The structural model

In response to the first objective of this research in examining the influence of the exogenous variables (materialism, stress, savings behaviour and compulsive buying behaviour) on the economic well-being of the single mothers, the significance of the individual path in the direct hypothesised structural model was referred. Table 2 outlines all of the individual paths in the direct model which show a significant influence of stress and compulsive buying behaviour on the economic well-being ( $C.R \geq \pm 1.645$ ,  $p \leq 0.05$ ).

The direct structural model shows no significant influence was found in the effect of materialism on economic well-being ( $\beta = 0.005$ ,  $C.R. = 0.066$ ,  $p = 0.947$ ) and the effect of savings behaviour on economic well-being of the single mothers ( $\beta = 0.079$ ,  $C.R. = 1.413$ ,  $p = 0.158$ ). Thus, the result did not support the H1 and H3 hypothesised. This finding was inconsistent with previous researches that found the empirical influence of materialism and savings behaviour on well-being (Gutter & Copur, 2011; Karabati & Cemalcilar, 2010; Manolis & Roberts, 2012). In comparison with the previous researches that used subjective well-being and life satisfaction dimension in determining the influence of materialism and savings behaviour on economic well-being, this study instead, had utilised its effects on economic well-being dimension. Hence, causing the inconsistencies in the results.

However, this study found a significant negative influence of stress ( $\beta = -0.390$ ,  $C.R. = -5.675$ ,  $p = 0.000$ ) and compulsive buying behaviour ( $\beta = -0.199$ ,  $C.R. = -3.129$ ,  $p = 0.002$ ) on the economic wellbeing of the single mothers. Therefore, the results denoted support for the H2 and H4 hypothesised in this research. The results seemed to confirm the findings of studies by Cho and Kim (2014); Kozka and Przybyla-Basista (2016); Manolis and Roberts (2012); Gutter and Copur (2011) although the researches were conducted by using the different context of well-being.

Table 3  
Regression weights in the direct hypothesized model

Hypothesised Relationships	Unstandardized Regression Weights Estimate B	S.E.	Standardized Regression Weights Beta	C.R.	p
Materialism → Economic Well-being	0.005	0.070	0.005	0.066	0.947
Stress → Economic Well-being	-0.404	0.071	-0.390	-5.675	0.000
Savings behaviour → Economic Well-being	0.081	0.057	0.079	1.413	0.158
Compulsive buying behaviour → Economic Well-being	-0.211	0.067	-0.199	-3.129	0.002

**Mediating Effect Analysis**

The bootstrap mediation structural model for compulsive buying behaviour is depicted in Figure 3. The compulsive buying behaviour structural model was found fitting the data with satisfactory GOF indices (RMSEA = 0.058, CFI = 0.946, NFI = 0.912, TLI = 0.936,  $\chi^2/df = 2.373$ ). The GOF indices showed that the CFI, NFI and TLI had significantly passed the 0.90 cut-off point. The RMSEA value of 0.058 which is below 0.08 was found to be at an acceptable range. Moreover, the relative chi-square value of 2.373 also indicated a satisfactory fit which is below the minimum threshold of 5.0.

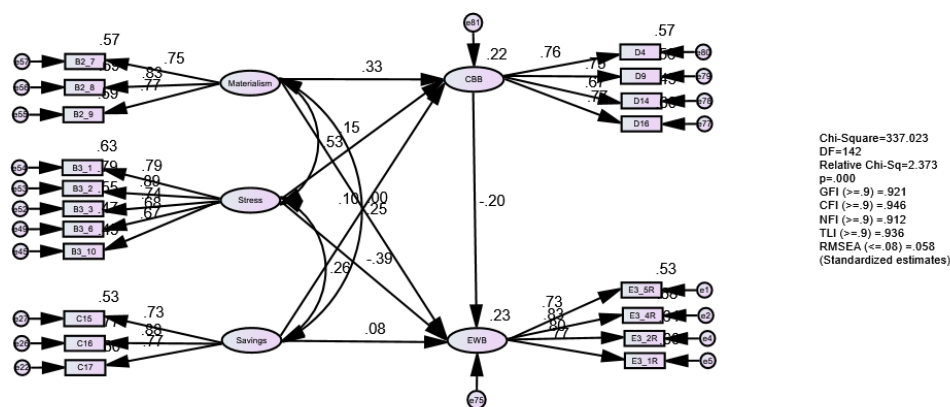


FIGURE 3. The bootstrap mediation model

The GOF indices were confirmed with a satisfactory fit, hence the mediation effect of compulsive buying behaviour in the effect of materialism, stress and savings behaviour on economic well-being was further assessed. Table 4 presents the results based on the direct model without mediation, direct model with mediation, the standardised indirect effect (SIE), the lower bound, the upper bound and the mediation results. The results showed significant SIE for materialism and stress effects on economic wellbeing which suggested the existence of mediation effect in the association. Apart from that, the zero value that falls outside the

lower bound and upper bound of the 95% confidence further support the mediation effect (Mathieu & Taylor, 2006). Accordingly, no mediation effect was found in the effect of savings behaviour on the economic well-being given with the non-significance of the SIE and the zero value that fall within the boundaries, hence the H5c was not supported.

In specific, the direct effect of materialism on economic well-being without mediation ( $\beta = -0.061, p = 0.369$ ) and with mediation effect ( $\beta = 0.005, p = 0.947$ ) showed no significance was found, thus it depicted that the effect was mediated by compulsive buying behaviour with indirect effect because the mediation existed only in the indirect effect of materialism on the compulsive buying behaviour and compulsive buying behaviour on economic well-being. Therefore, the H5a was supported where compulsive buying behaviour mediated the effect of materialism on economic well-being through the indirect effect. The indirect effect of compulsive buying behaviour in the influence of materialism on economic well-being in this study showed that single mothers who exhibit materialistic values which might cause inferiority and the need to compare with others might show a compulsive buying behaviour which can deteriorate their economic well-being. This finding supports previous studies which found a positive association between materialism and compulsive buying behaviour (Eren et al., 2012; Rasool et al., 2012) also a negative association between compulsive buying behaviour and economic well-being (Gutter & Copur, 2011; Manolis & Roberts, 2012; Zhang et al., 2017)

Besides that, the significance was found in the direct model without mediation ( $\beta = -0.419, p = 0.000$ ) and with mediation ( $\beta = -0.390, p = 0.000$ ) in the effect of stress on economic well-being. It reflected that the compulsive buying behaviour had mediated the influence through partial mediation. Thus, it implied the support for the H5b, where the compulsive buying behaviour had mediated the effect of stress on economic well-being through partial mediation. The result was parallel to previous research which found an indirect effect of stress related to family conflicts predicted compulsive buying behaviour (Baker et al., 2016) thus, lead to negative economic well-being. In the similar vein, the current finding seems to be consistent with the study of Zhang et al (2017) which posited that individuals tend to use compulsive buying behaviour as coping strategy in an attempt to relieve from stressful events that occurred in their lives. As a domino effect, it also can affect individuals' economic well-being causes by such behaviour.

Table 4

*The effect of exogenous variables on economic well-being through the mediation of compulsive buying behaviour*

Exogenous variable	Direct model		Full mediation model				95% Confidence interval		Mediation type
	$\beta$	$p$	$\beta$	$p$	Standardised Indirect Effect (SIE)	$p$	Lower bound	Upper bound	
Materialism	-0.061	0.369	0.005	0.947	-0.067	0.003	-0.135	0.021	Indirect effect
Stress	-0.419	0.000	-0.390	0.000	-0.029	0.030	-0.081	0.002	Partial mediation
Savings behaviour	0.059	0.297	0.079	0.158	-0.019	0.069	-0.056	0.001	No mediation

### Conclusion

The current study investigated the influence of materialism, stress, savings behaviour, compulsive buying behaviour and economic well-being among single mothers in Peninsular Malaysia. Firstly, it was hypothesised that materialism, stress, savings behaviour and compulsive buying behaviour has a significant influence on economic well-being. Secondly, it was also hypothesised that compulsive buying behaviour can significantly mediate the influence of materialism, stress and savings behaviour on economic well-being. In this study, the SEM analysis was conducted to test the aforementioned hypotheses.

The findings showed that stress and compulsive buying behaviour had a significant influence on the single mother's economic well-being. In addition, the results also revealed that stress has the most remarkable influence on economic well-being, followed by compulsive buying behaviour. The negative influence that stress exerts on economic well-being has demonstrated that the single mothers had experienced psychological stress and it negatively affects their state of economics. Furthermore, the negative influence of compulsive buying behaviour on economic well-being also depicts the consequences of indulging in purchasing unnecessary goods on the single mothers' economic state due to the increasing financial hardship resulting from their compulsive purchases. The findings also highlight the mediation effect of compulsive buying behaviour in the influence of materialism and stress on the economic well-being. The mediation effect of compulsive buying behaviour was consistent with findings from Ahtziger et al (2015) which found full mediation of compulsive buying behaviour between self-control as a predictor to individuals' debts.

It is also noteworthy to highlight that the majority of the respondents were among middle-aged women with a median age of 54 years old, Malay ethnicity, had secondary school

as the highest level of education, mostly widows and had asset less than debt value. This trend of single mothers' profile was congruent with previous studies of single mothers in Malaysia (Endut et al., 2015; Ghani & Aziz, 2013). However, the single mothers' profile was different when compared to the United States where the majority of the single mothers were within the young adult age cohort and mainly among the African American, non-Hispanic ethnicity (Barnhart & Maguire-Jack, 2016; Sperlich et al., 2013). The profile differences between single mothers in the Western countries and the Asian countries could be because of the fact that non-marital childbirth was common in the Western countries (Nonoyama-Tarumi, 2017). Therefore, it explains the majority of the single mothers in the Western countries were detected among the young adult age cohort. Conversely, most of the divorce cases occurred during middle age and generally attributed as experiencing with midlife crisis (Wethington, 2000), hence explains the majority of the middle-aged single mothers' cohort in the Asian countries.

The findings also ratify the Escape theory which was applied as the fundamental theory of the current study. The materialistic values which demonstrate a strong desire for wealth and possession suggest such values are congruent with consumption as a strategy to alleviate individuals' mood through material goods. Therefore, following the beliefs that material goods can alleviate ones' social status, the compulsive buying behaviour was exhibited as a means to escape from self-awareness and to act according to such beliefs. The evidence is prominent when the majority of the respondents had debt greater than asset value and to align with that, compulsive buying behaviour is known to be one of the predictors for individuals' debts and bankruptcy (Achtziger et al., 2015; Zamzamin et al., 2015). Moreover, based on the premise from the escape theory, compulsive buying behaviour is used to escape from negative mood states that cause stress and depression (Muller et al., 2015). Single mothers who need to act as sole-breadwinner for the family and at the same time need to rebalance their state of lives are inclined to become overwhelmed, hence causes the stressfulness. As a mean to escape from anxiety and negative emotions, compulsive buying behaviour was practised as a coping strategy. However, such behaviour negatively affects them in a long term especially related to their economic well-being, instead of the positive effects that they would momentarily feel.

There are a few possible implications that may be drawn from this study. Firstly, the authorities need to consider offering much better financial education to single mothers. Practising positive financial behaviour was proved to be able to hinder the compulsive buying behaviour cycle (Pham et al., 2012), hence it can help individuals especially single mothers with compulsive buying behaviour to correct such behaviour. Secondly, in attempt to improve the single mothers' economic well-being, single mothers should also be given the awareness of the importance of prioritising needs above wants and practising mindful shopping behaviour which can help in making better decisions during purchasing. Given with current pandemic situation of the Covid-19, which deteriorates the global economic situation and impacted the GDP and financial institution, it is crucial especially for single mothers to make conscious financial decisions to reduce its impact to them. Thirdly, each of the single mothers' organisation should be offered with a flexible counselling time with a certified counsellor regularly to manage and reduce the stress faced by the single mothers, thus having better economic well-being in the long-run.

There were several limitations that should be highlighted in this study. Firstly, this study examined the savings behaviour dimension independently rather than the overall aspects of



financial management behaviour. Future studies should consider incorporating the other dimensions of financial management behaviour such as creditworthiness, cash management or might as well use the general financial management behaviour variable in establishing a much comprehensive view on the variable. Secondly, the single mothers of this study were based on those who residing in Peninsular Malaysia only, hence future studies should consider incorporating the economic well-being of single mothers in Sabah and Sarawak too for wider generalisability in the context of Malaysian single mothers.

### Acknowledgement

We would like to thank the financial support given by the Putra Graduate Initiative Grant (GP-IPS) under vote number 9603300, Universiti Putra Malaysia (UPM). Fatin Farwizah Mat Rahim would also like to express her gratitude to UPM for providing her financial assistance under the Graduate Research Fellowship (GRF) program.

### References

- Aassve, A., Betti, G., Mazzuco, S., & Mencarini, L. (2007). Marital disruption and economic well-being: A comparative analysis. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 170(3), 781-799. <https://doi.org/10.1111/j.1467-985X.2007.00483.x>
- Abolghasemi, A., & Varaniyab, S. T. (2010). Resilience and perceived stress: Predictors of life satisfaction in the students of success and failure. *Procedia-Social and Behavioral Sciences*, 5, 748-752. <https://doi.org/10.1016/j.sbspro.2010.07.178>
- Achtziger, A., Hubert, M., Kenning, P., Raab, G., & Reisch, L. (2015). Debt out of control: The links between self-control, compulsive buying, and real debts. *Journal of Economic Psychology*, 49, 141-149. <https://doi.org/10.1016/j.joep.2015.04.003>
- Ahmad, W. I. W., & Ismail, Z. (2010). The life quality and the future hope of the single Malay Muslim mothers in the East Coast of Malaysia. *Islamiyyat*, 32, 173-202.
- Ahmad, S. Y., Sabri, M. F., Rahim, H. A., & Osman, S. (2017). Factors predicting financial security of female headed households. *Journal of Emerging Economies and Islamic Research*, 5(1), 25-38.
- Al-Dubai, S. A. R., Al-Shagga, M. A., Rampal, K. G., & Sulaiman, N. A. (2012). Factor structure and reliability of the Malay version of the perceived stress scale among Malaysian medical students. *Malays Journal of Medical Science*, 19(3), 43-49.
- Awang, Z., Afthanorhan, W. M. A. W., & Asri, M. A. M. (2015). Parametric and non-parametric approach in structural equation modelling (SEM): The application of bootstrapping. *Modern Applied Science*, 9(9), 58. <https://doi.org/10.5539/mas.v9n9p58>
- Baker, A., Mathur, A., Fatt, C. K., Moschis, G. P., & Rigdon, E. E. (2013). Using the life course paradigm to explain mechanisms that link family disruptions to compulsive buying. *Journal of Consumer Affairs*, 47(2), 263-288.
- Baker, A. M., Moschis, G. P., Rigdon, E. E., & Fatt, C. K. (2016). Linking family structure to impulse-control and obsessive-compulsive buying. *Journal of Consumer Behaviour*, 15(4), 291-302. <https://doi.org/10.1002/cb.1579>
- Barnhart, S., & Maguire-Jack, K. (2016). Single mothers in their communities: The mediating role of parenting stress and depression between social cohesion, social control and child maltreatment. *Children and youth services review*, 70, 37-45. <https://doi.org/10.1016/j.childyouth.2016.09.003>

- Bonfanti, K., Matos, C. A. D., & Falcao, L. T. (2010). A family therapy approach for studying compulsive buyers: an exploratory study. *IV Encontro de Marketing da ANPAD*, 1-10.
- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the United States. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health: Claremont symposium on applied social psychology* (pp. 31-67). Newbury Park, CA: Sage Publications.
- Cho, S. J., Kim, B. S. (2014). The relationship between stress and life satisfaction among the elderly: The mediating effects of depression, self-efficacy and mindfulness. *Journal of the Korean Gerontological Society*, 34(1), 49–71.
- Cunningham, E., Holmes-Smith, P., & Coote, L. (2006). *Structural equation modeling: From the fundamentals to advanced topics*. Melbourne: Streams Statsline.
- Darrat, A. A., Darrat, M. A., & Amyx, D. (2016). How impulse buying influences compulsive buying: The central role of consumer anxiety and escapism. *Journal of Retailing and Consumer Services*, 31, 103-108. <https://doi.org/10.1016/j.jretconser.2016.03.009>
- Dittmar, H. (2004). Understanding and diagnosing compulsive buying. In R. Coombs (Ed.), *Handbook of addictive disorders: A practical guide to diagnosis and treatment*, (pp. 411-450). New York, NY: Wiley.
- Edwards, E. A. (1993). Development of a new scale for measuring compulsive buying behavior. *Financial Counseling and Planning*, 4(1), 67-84.
- Endut, N., Azmawati, A. A., & Hashim, I. H. M. (2015). Formal and informal support systems for single women and single mothers in Malaysia. *SHS Web of Conferences*, 18(03002), 1-9. <https://doi.org/10.1051/shsconf/20151803002>
- Eren, S. S., Eroglu, F., & Hacıoglu, G. (2012). Compulsive buying tendencies through materialistic and hedonic values among college students in Turkey. *Social and Behavioral Sciences*, 58, 1370-1377.
- Evans, M. (2011). Single Mothers in Malaysia: social protection as an exercise of definition in search of solution. *International Conference: Social Protection for Social Justice*, the United Kingdom: Institute of Development Studies. Retrieved from <https://www.ids.ac.uk/download.php?file=files/dmfile/Evans2011SinglemothersandsocialprotectioninMalaysiaCSPconferencedraft.pdf>
- Faber, R. J. (2006). A theoretical account for compulsive buying: An application of escape theory. *Advances in Consumer Research*, 33(1), 131–133.
- Finnis, J. (2011). *Natural law and natural rights*. Oxford University Press.
- Fletcher, G. (2013). A fresh start for the objective-list theory of well-being. *Utilitas*, 25(2), 206-220. <https://doi.org/10.1017/S0953820812000453>
- Garðarsdóttir, R. B., & Dittmar, H. (2012). The relationship of materialism to debt and financial well-being: The case of Iceland's perceived prosperity. *Journal of Economic Psychology*, 33(3), 471-481. <https://doi.org/10.1016/j.joep.2011.12.008>
- Ghani, F. A., & Aziz, A. A. (2013). Profile of single mothers in Southern Malaysia and issues afflicting their lives. *British Journal of Arts and Social Sciences*, 16(1), 197-206.
- Gornik-Durose, M. E. (2020). Materialism and well-being revisited: The impact of personality. *Journal of Happiness Studies*, 21, 305–326. <https://doi.org/10.1007/s10902-019-00089-8>
- Gutter, M., & Copur, Z. (2011). Financial behaviors and financial well-being of college students: Evidence from a national survey. *Journal of Family and Economic Issues*, 32, 699-714. <https://psycnet.apa.org/doi/10.1007/s10834-011-9255-2>

- Guven, C. (2012). Reversing the question: Does happiness affect consumption and savings behavior? *Journal of Economic Psychology*, 33(4), 701-717.  
<https://doi.org/10.1016/j.joep.2012.01.002>
- Hair, J. F., Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis* (3rd ed.). New York, NY: Macmillan Publishing Company.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). New York, NY: Pearson Prentice Hall.
- Hamid, S. R. A., & Salleh, S. (2013). Exploring single parenting process in Malaysia: Issues and coping strategies. *Procedia-Social and Behavioural Sciences*, 84, 1154-1159.  
<https://doi.org/10.1016/j.sbspro.2013.06.718>
- Headey, B., & Wearing, A. J. (1992). *Understanding happiness: A theory of subjective well-being*. Melbourne: Longman Cheshire.
- Hilgert, M. A., & Hogarth, J. M. (2003). Household financial management: The connection between knowledge and behaviour. *Federal Reserve Bulletin*, 88, 309-322.
- Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS*. Florida: Chapman & Hall/CRC.
- Hogarth, J. M., & Anguelov, C. E. (2004). Are families who use e-banking better financial managers? *National Endowment for Financial Education*, 19, 1-34.
- Idris, N. A., & Selvaratnam, D. P. (2012). Program pembasmian kemiskinan dalam kalangan ibu tunggal: Analisis penyertaan dan keberkesanan. *Prosiding PERKEM VII, jilid, 1*, 248-259.
- Jaccard, J., & Wan, C. K. (1996). *Quantitative applications in the social sciences, No. 07-114. LISREL approaches to interaction effects in multiple regression*. Sage Publications, Inc.
- Joo, S. (2008). Personal financial wellness. In *Handbook of consumer finance research* (pp. 21-33). Springer, New York, NY.
- Kahneman, D., Diener, E., & Schwartz, N. (1998). *Understanding well-being: Scientific perspectives on enjoyment and suffering*. New York: Russell Sage Foundation.
- Karabati, S., & Cemalcilar, Z. (2010). Values, materialism, and well-being: A study with Turkish university students. *Journal of Economic Psychology*, 31, 624-633.  
<https://doi.org/10.1016/j.joep.2010.04.007>
- Kitayama, S., & Markus, H. R. (2000). The pursuit of happiness and the realization of sympathy: Cultural patterns of self, social relations, and well-being. *Culture and subjective well-being*, 1, 113-161.
- Kózka, A., & Przybyła-Basista, H. (2016). The relationships between perceived stress and psychological well-being among mothers and fathers of children with Down syndrome. *The New Educational Review*, 44(2), 285-294.
- Kwak, H., Zinkhan, G. M., & Roushanzamir, L. E. P. (2004). Compulsive comorbidity and its psychological antecedents: A cross-cultural comparison between the US and South Korea. *Journal of Consumer Marketing*, 21(6), 418-434.  
<https://doi.org/10.1108/07363760410558681>
- Lei, M., & Lomax, R. G. (2005). The effect of varying degrees of nonnormality in structural equation modeling. *Structural equation modeling*, 12(1), 1-27.  
[https://doi.org/10.1207/s15328007sem1201\\_1](https://doi.org/10.1207/s15328007sem1201_1)
- Manolis, C., & Roberts, J. A. (2012). Subjective well-being among adolescent consumers: The effect of materialism, compulsive buying, and time affluence. *Applied Research Quality Life*, 7, 117-135. <https://doi.org/10.1007/s11482-011-9155-5>

- Maraz, A., Eisinger, A., Hende, Urbán, R., Paksi, B., Kun, B., ... Demetrovics, Z. (2015). Measuring compulsive buying behaviour: Psychometric validity of three different scales and prevalence in the general population and in shopping centres. *Psychiatry Research*, 225, 326–334. <https://doi.org/10.1016/j.psychres.2014.11.080>
- Martin, K. D., & Hill, R. P. (2015). Saving and well-being at the base of the pyramid: Implications for transformative financial services delivery. *Journal of Service Research*, 1-17. <https://doi.org/10.1177/1094670514563496>
- Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in Organizational Behavior. *Journal of Organizational Behavior*, 27(8), 1031-1056. <https://doi.org/10.1002/job.406>
- Ministry of Women, Family and Community Development. (2015). *Statistics on women, family and community 2015*. Ministry of Women, Family and Community Development.
- Mulia, D. S. (2017). Survival strategies of single mothers among indigenous ethnics in rural areas: Case study in Kota Belud, Sabah. *Jurnal Kinabalu*, 23, 43-63. Retrieved from <https://jurcon.ums.edu.my/ojums/index.php/ejk/article/view/1123>
- Muller, A., Mitchell, J. E., Crosby, R. D., Cao, L., Johnson, J., Claes, L., & Zwaan, M. D. (2012). Mood states preceding and following compulsive buying episodes: An ecological momentary assessment study. *Psychiatry Research*, 200, 575-580. <https://doi.org/10.1016/j.psychres.2012.04.015>
- Muller, A., Mitchell, J. E., & Zwann, M. D. (2015). Compulsive buying. *The American Journal on Addictions*, 24, 132–137. <https://doi.org/10.1111/ajad.12111>
- Mueller, A., Claes, L., Mitchell, J.E., Faber, R.J., Fischer, J., & Zwaan, M. D. (2011). Does compulsive buying differ between male and female students? *Personality and Individual Differences*, 50(8), 1309-1312. <https://doi.org/10.1016/j.paid.2011.02.026>
- Nonoyama-Tarumi, Y. (2017). Educational achievement of children from single-mother and single-father families: The case of Japan. *Journal of Marriage and Family*, 79(4), 915-931. <https://doi.org/10.1111/jomf.12409>
- O’Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. *Journal of Consumer Research*, 16(2), 147 – 157. <https://psycnet.apa.org/doi/10.1086/209204>
- Omar, N. A., Nazri, M. A., & Wel, C. A. C. (2014). Entrepreneurial training of low-income women micro enterprises in the service sector in Malaysia: Understanding the problems and challenges. *Journal of Social and Development Sciences*, 5(4), 245-257. <https://doi.org/10.22610/jsds.v5i4.824>
- Organization for Economic Cooperation and Development. (2011). *Doing Better for Families*. Paris: OECD Publishing. Retrieved from <https://www.oecd.org/social/family/47849499.pdf>
- Organization for Economic Cooperation and Development. (2013). *OECD guidelines on measuring subjective well-being*. Retrieved from <http://dx.doi.org/10.1787/9789264191655-en>
- Organization for Economic Cooperation and Development. (2014). *Family database*. Retrieved from [http://www.oecd.org/els/soc/CO2\\_2\\_ChildPoverty\\_Jan2014.pdf](http://www.oecd.org/els/soc/CO2_2_ChildPoverty_Jan2014.pdf)
- Pham, T. H., Yap, K., & Dowling, N. A. (2012). The impact of financial management practices and financial attitudes on the relationship between materialism and compulsive buying. *Journal of Economic Psychology*, 33, 461-470. <https://psycnet.apa.org/doi/10.1016/j.joep.2011.12.007>

- Porter, N. M., & Garman, E. T. (1993). Testing a conceptual model of financial well-being. *Financial Counseling and Planning*, 4, 135-165.
- Rasool, S., Kiyani, A., Khattak, J. K., Ahmed, A., & Ahmed, M. M. (2012). The impact of materialism on compulsive consumption in Pakistan. *African Journal of Business Management*, 6(49), 11809-11818. <https://doi.org/10.5897/AJBM11.1870>
- Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31(1), 209-219. <https://psycnet.apa.org/doi/10.1086/383436>
- Roddin, R., Sidi, N. S. S., Yusof, Y., Mohamed, M., & Razzaq, A. R. A. (2011). Poverty alleviation among single mother in Malaysia: Building entrepreneurship capacity. *International Journal of Business and Social Science*, 2(17), 92-99.
- Sabri, M. F., Reza, T. S., & Wijekoon, R. (2020). Financial management, savings and investment behavior and financial well-being of working women in the public sector. *Majalah Ilmiah Bijak*, 17(2), 135-153.
- Salignac, F., Hamilton, M., Noone, J., Marjolin, A., & Muir, K. (2019). Conceptualizing financial wellbeing: An ecological life-course approach. *Journal of Happiness Studies*, 1-22. <https://doi.org/10.1007/s11205-019-02100-4>
- Searle, B. (2008). *Well-being: In search of a good life?* Policy Press.
- Shrum, L. J., Wong, N., Arif, F., Chugani, S. K., Gunz, A., Lowrey, T. M., ... & Scott, K. (2013). Reconceptualizing materialism as identity goal pursuits: Functions, processes, and consequences. *Journal of Business Research*, 66(8), 1179-1185. <https://doi.org/10.1016/j.jbusres.2012.08.010>
- Singh, R., & Nayak, J. K. (2015). Life stressors and compulsive buying behaviour among adolescents in India. *South Asian Journal of Global Business Research*, 4(2), 251-274. <https://doi.org/10.1108/SAJGBR-08-2014-0054>
- Sirgy, M. J. (2018). The psychology of material well-being. *Applied Research in Quality of Life*, 13(2), 273-301. <https://doi.org/10.1007/s11482-017-9590-z>
- Sperlich, S., Maina, M. N., & Noeres, D. (2013). The effect of psychosocial stress on single mother' smoking. *BMC Public Health*, 13(1125), 1-10. <http://www.biomedcentral.com/1471-2458/13/1125>
- Stack, R. J., & Meredith, A. (2018). The impact of financial hardship on single parents: An exploration of the journey from social distress to seeking help. *Journal of family and economic issues*, 39(2), 233-242. <https://doi.org/10.1007/s10834-017-9551-6>
- Statistisches Bundesamt. (2013). *Haushalte und Familien: Ergebnisse des Mikrozensus (Households and Families: Results of the Microcensus)*. Fachserie 1 Reihe 3. Wiesbaden, German: Statistisches Bundesamt.
- Villardefrancos, E., & Otero-Lopez, J. M. (2016). Compulsive buying in university students: Its prevalence and relationships with materialism, psychological distress symptoms, and subjective well-being. *Comprehensive Psychiatry*, 65, 128-135. <https://doi.org/10.1016/j.comppsy.2015.11.007>
- Western, M., & Tomaszewski, W. (2016). Subjective wellbeing, objective wellbeing and inequality in Australia. *PLoS ONE*, 11(10), 1-20. <https://doi.org/10.1371/journal.pone.0163345>
- Wethington, E. (2000). Expecting stress: Americans and "midlife crisis". *Motivation and Emotion*, 24(2), 85-103. <https://doi.org/10.1023/A:1005611230993>
- World Health Organization. (2012). *Depression: a global public health concern*. Geneva, Switzerland: Marcus M., Yasamy M. T., van Ommeren M., Chisholm D., & Saxena S.

- Xiao, J. J. (2013). Family economic well-being. In G.W. Peterson & K.R. Bush (Eds.), *Handbook of Marriage and the Family* (pp. 573-611). New York, NY: Springer Science + Business Media.
- Yi, S. (2012). Shame-proneness as a risk factor of compulsive buying. *Journal of Consumer Policy* 35(3),393–410. <https://doi.org/10.1007/s10603-012-9194-9>
- Zarina, M. N., & Kamil, A. A. (2012). Sustaining the livelihood of single mothers through wealth creation and savings opportunities: A long road ahead. *International Journal of Trade and Finance*, 3(2), 126-131. <https://doi.org/10.7763/IJTEF.2012.V3.185>
- Zamzamin, Z., Jaini, A., & Mat Zaib, S. Z. (2015). Bankruptcy among young users of credit card in Malaysia: A case study of RHB Islamic (Menara Yayasan Tun Razak) bank customers. In *The Proceedings of The 4th International Seminar on Entrepreneurship and Business (ISEB 2015)*. Faculty of Entrepreneurship and Business, UMK, 628-636.
- Zhan, M., & Pandey, S. (2004). Economic well-being of single mothers: Work first or postsecondary education? *Journal of Sociology and Social Welfare*, 31(3), 87-112. Retrieved from <https://scholarworks.wmich.edu/jssw/vol31/iss3/6>
- Zhang, C., Brook, J. S., Leukefeld, C. G., Rosa, M. D. L., & Brook, D. W. (2017). Compulsive buying and quality of life: An estimate of the monetary cost of compulsive buying among adults in early midlife. *Psychiatry Research*, 252, 208-214. <https://doi.org/10.1016/j.psychres.2017.03.007>