Mediating Role of Financial Behavior between Financial Factors and Economic Well-being: Through the Lens of the Extended Family Resource Management Model

Rusitha Wijekoon, Mohamad Fazli Sabri, Nobaya Ahmad & Husniyah Abd Rahim

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i10/15194 DOI:10.6007/IJARBSS/v12-i10/15194

Received: 10 August 2022, Revised: 13 September 2022, Accepted: 29 September 2022

Published Online: 05 October 2022

In-Text Citation: (Wijekoon et al., 2022)
To Cite this Article: Wijekoon, R., Sabri, M. F., Ahmad, N., & Rahim, H. A. (2022). Mediating Role of Financial Behavior between Financial Factors and Economic Well-being: Through the Lens of the Extended Family Resource Management Model. International Journal of Academic Research in Business and Social Sciences, 12(10), 30 – 48.

Copyright: © 2022 The Author(s)
Published by Human Resource Management Academic Research Society (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. 30 – 48
http://hrmars.com/index.php/pages/detail/IJARBSS

Full Terms & Conditions of access and use can be found at
http://hrmars.com/index.php/pages/detail/publication-ethics
Mediating Role of Financial Behavior between Financial Factors and Economic Well-being: Through the Lens of the Extended Family Resource Management Model

Rusitha Wijekoon\textsuperscript{1,2}, Mohamad Fazli Sabri\textsuperscript{1,3}, Nobaya Ahmad\textsuperscript{4} & Husniyah Abd Rahim\textsuperscript{1}

\textsuperscript{1}Department of Resource Management & Consumer Studies, Faculty of Human Ecology, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia, \textsuperscript{2}Technology Transfer Division, Coconut Research Institute of Sri Lanka, Lunuwila, 61150, Sri Lanka, \textsuperscript{3}Institute for Social Science Studies (IPSAS), Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia, \textsuperscript{4}Department of Social and Development Sciences, Faculty of Human Ecology, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia.

Corresponding Author’s Email: fazli@upm.edu.my

Abstract

The major aim of this study is focused on assessing the direct, and indirect factors that affect individuals’ economic well-being. The multistage random sampling was utilized to choose the sample of the coconut growers in Sri Lanka. The data were analyzed by PLS-SEM in Smart-PLS. All the direct relationships between the determinants of economic well-being (financial behavior, financial knowledge, money attitude), and economic well-being were revealed significant, and their impact was positive. All together 88.9% of the total variance of economic well-being was explained by the three variables. Moreover, the impact of money attitudes, and financial knowledge on financial behavior was also examined. But, only money attitude, and financial behavior association was confirmed, and 78.2% of variance in financial behavior was clarified. The financial behavior was further hypothesized as a mediator between financial knowledge, money attitude, and economic well-being, but only money attitude, and economic well-being relationship was mediated by the financial behavior. The current study widens our understanding of financial factors, and their impact on economic well-being, and coconut growers, academicians, and policy makers can use this knowledge to avoid barriers, address the research gaps in the context of family economics and management, and design policy guidelines.

Keywords: Family Resource Management Model, Financial Behavior, Financial Knowledge, Economic Well-being, Money Attitudes, PLS-SEM.
Introduction
Prudent personal, and household financial management has become critical for improving economic well-being at all phases of life, including retirement. Despite significant governmental, and private sector efforts to promote individuals’ financial management techniques, financial knowledge, and positive financial behaviors, there is a limited understanding of the elements that underlie sound behavior in dealing individual finances. Individuals’ economic well-being, and personal finance is bound tightly, and hence, nowadays economic well-being is increasingly becoming a topic of discussion in the context of family economics and management. However, given the complexity of the financial markets, it is not easy to increase one’s economic well-being, which is a major purpose of financial education in many countries throughout the world.

Financial knowledge is widely acknowledged as a vital component of economic and financial stability and prosperity. Almenberg et al (2019) found those who have financial knowledge makes better financial decisions for themselves as well as their families which is bound to increase well-being. Interestingly, financial knowledge was identified as the major determinant of wealth inequality (Lusardi, 2019). Individuals who are financially well-informed take better decisions for their households in general (Atkinson & Messy, 2012), and are thus in a better position to improve their financial well-being. Furthermore, Clark and D’Ambrosio (2008) identified a lack of financial understanding as one of the key issues limiting an individual’s access to the financial markets. Financial knowledge was commonly utilized as an input to model the need for enhanced financial education and clarify disparities in economic well-being in this regard. Moreover, according to the growing body of research in the field of economic psychology, Individual variances in money attitudes may be significant for several purposes, including designing motivational systems for work, understanding debt, saving, and consumption behavior (Hayhoe et al., 2012). This is majorly due to the growing awareness among academics, and policy makers on the effect of money attitudes that play an important role when influencing the economic well-being.

Financial behavior is one of the human behaviors that is related to money management, and financial decision-making, for example, developing and controlling an appropriate budget programs. The OECD (2013) stated that financial behavior is very significant, and an important element of persons’ economic well-being. For Atkinson and Messy (2012), individuals’ positive financial behaviors such as proper budgeting and caring financial stability increases their financial literacy, while negative financial behaviors, for instance, depending heavily on credit and loans, declines their well-being. Hence, as an important antecedent of economic well-being, it is essential to include in economic well-being studies.

Given the lack of consistency in the antecedents, and their potential direct and indirect impacts on economic well-being, need further research that use theoretically sound, empirically-based multidimensional measures of economic well-being to examine the association of economic well-being with different contexts. To address this need, the current study utilized the Family Resource Management Model (FRMM; Deacon & Firebaugh, 1988). Hence, using this theoretical framework, current study seeks to assess financial related variables (financial behavior, financial knowledge, money attitudes), and the subsequent effect of these variables on Sri Lankan coconut growers’ economic well-being, which departs from prior studies that have constrained their outcomes only to the direct relationships of economic well-being. Moreover, no study has investigated the combined influence of money
attitudes, and financial knowledge on economic well-being, and mediation effect of financial behavior on the associations between financial knowledge, money attitudes, and economic well-being.

Coconut has a significant impact on Sri Lanka’s livelihood and economy. In 2019, it generated Rs. 108.9 billion (US $ 609.77 million) foreign exchange which was contributed for 0.8% of GDP of the country. Coconut sector provides livelihood directly and indirectly for around 700,000 persons; directly 100,000 in cultivation and 35,000 in the industry (Central Bank of Sri Lanka, 2019). The coconut was originally a major plantation crop throughout the humid tropics, including Sri Lanka, but now the coconut cultivation in Sri Lanka is dominated by the smallholders, and current extent of coconut in Sri Lanka is 443,538 ha. Based on the census and statistics of Central Bank of Sri Lanka (2014), the smallholding sector accounts for 83.7% of Sri Lanka’s coconut cultivating lands, indicating the importance of the smallholding sector to the national coconut production. Smallholdings could be considered as coconut lands which are less than 20 acres (8.1 ha), that includes home gardens with scattered coconut palms. Due to the lower productivity levels majority of the small holding coconut growers in Sri Lanka are poor and their economic well-being level is low (Central Bank of Sri Lanka, 2019).

Moreover, until now, there has been insufficient research in the topic of economic well-being among Sri Lankan coconut growers. As a result, it has become critical to explore the factors that influence economic well-being, and to acknowledge its significance among individuals. Because of the association between financial behavior, financial knowledge, money attitude, and the level of economic well-being of coconut growers in Sri Lanka is unclear, therefore, the researchers attempted to investigate the antecedents that influence economic well-being among growers who cultivate coconut. Current research aims to offer comprehensive recommendations for encouraging economic well-being by constructing the proposed framework that evaluates growers’ financial knowledge, financial behavior, and money attitudes, as well as their impact on the economic well-being of Sri Lankan coconut growers.

The following part provides a literature review on economic well-being, financial behavior, financial knowledge, and money attitudes, as well as an explanation of the constructs, and methods utilized. The hypotheses are then tested, and the PLS-SEM model findings are discussed. Finally, the article concluded with recommendations for future research and ramifications.

**Literature Review**

**Theoretical Foundation**

This study’s theoretical framework is based on Deacon and Firebaugh’s (1988) Family Resource Management Model (FRMM), which explains how a family manages its resources to fulfil its goals. It is a systems-oriented management method in which management is defined as “the process of using resources to achieve goals” (Goldsmith, 2005, p. 24). Inputs, throughputs, outputs, and the feedback loop are the four stages of the model that describe how family make financial decisions and develop financial behaviors (Figure 1). According to the model, the inputs goes through throughput, resulting in observable output. Prior studies have evidenced that the FRMM was successfully applied to explain the financial related issues associated with individuals. For example, Mimura (2014) investigated married women’s life happiness, and its relationship with household financial preparation in Japan. In a different study, the link between family income, and well-being was studied by (Mimura et al., 2019).
Moreover, economic well-being study with Sri Lankan coconut growers by Wijekoon et al. (2021a) also utilized the FRMM as a base theory. Thus, the FRMM was chosen as the base of the current conceptual framework, and the financial knowledge, and the money attitudes are the external inputs of the current study, which are going through the throughput which is the financial behavior. The financial management studies usually define inputs as material resources such as, money (income, savings, assets etc.), and human resources like, financial literacy, financial knowledge, financial behavior, money attitudes, experience, education, and age (Lusardi et al., 2010). Throughput; financial behavior goes through both the personal and managerial subsystems of an individual to gain the output; economic well-being.

Figure 1: Family Resource Management Model (Deacon & Firebaugh, 1988)

**Economic Well-being**

According to the Organization for Economic Co-operation and Development (OECD, 2019), the “Economy of Well-being” can be defined as an economy that (1) expands the opportunities available to people for upward social mobility and for improving their lives along the dimensions that matter most to them; (2) ensures that these opportunities translate into well-being outcomes for all segments of the population, including those at the bottom of the distribution; and (3) reduces inequalities; and 4. fosters environmental and social sustainability. Economic well-being is evaluation of both objective, and subjective components of life of a person (Ahmad et al., 2016). The OECD (2015) stated that “economic well-being is multidimensional, covering aspects of life ranging from civic engagement to housing, from household income to work-life-balance, and from skills to health status” (p. 1). Although economic well-being is widely discussed, there is no universally accepted definition of what it is, and the terms “quality of life”, “well-being”, “happiness”, and “life satisfaction” are commonly used interchangeably (OECD, 2013). Family economic well-being, on the other hand, was defined by Xiao (2013) as “a family economic status that has sustainably adequate economic resources to live a comfortable life” (p. 573). It is one of the most important aspects of a person’s well-being since it determines how likely they are to consume, and how much control they have over their resources (OECD, 2013).

Furthermore, according to the OECD (2011), income and wealth are critical constituents of economic well-being. People’s income facilitates them to meet their fundamental necessities while also pursuing a number of other goals that are significant to them, and their wealth helps them to keep these aspirations over time. Consequently, almost every organization that produces well-being measures recognizes the importance of family economic well-being to overall well-being, however the link between family economic well-being, and overall well-being is not always clear (OECD, 2013). Moreover, Individual freedom, spiritual and intellectual richness, and interpersonal relations are just a few of the characteristics that go
beyond the economic measurement of income or wealth when it comes to determining an individual’s or a nation’s economic well-being (Brugnoli et al., 2009).

Financial Knowledge
According to Robb and Woodyard (2011), “the ability to understand financial concepts and positively related to financial practices such as, cash flow management, credit management, savings, and investment” is called financial knowledge (p. 65). Individuals with improved financial knowledge can better understand financial concepts and make prudent decisions to increase their financial well-being. Furthermore, Kholilah and Iramani (2013) identified seven areas that must be met in order to have good financial understanding, including: “1) knowledge of interest and credit, 2) knowledge related to financial budget preparation, 3) knowledge of investment in deposits, 4) knowledge of investment shares, 5) knowledge of how to invest in property, 6) knowledge of investing in mutual funds, and 7) knowledge of insurance” (p. 70). Furthermore, Tang and Baker (2016) described the bi-dimensional nature of financial knowledge: “what an individual actually knows (objective financial knowledge) and what he believes he knows (subjective financial knowledge)” (p. 166). Further, financial knowledge positively influences the people’s economic well-being (Wijekoon et al., 2021a; 2021b; 2021c; 2021d). Depending on the discussed literature, the developed hypothesis is;

H₁: A positive link exists between financial knowledge and economic well-being.

There are several empirical evidences found to support the positive link between financial knowledge, and positive financial behavior (Lusardi & Mitchell, 2007; Tang et al., 2015). Hence, the formulated hypothesis is;

H₂: A positive link exists between financial knowledge and financial behavior.

Money Attitudes
Money attitude describes as “personal inclination towards financial matters” (Rai et al., 2019, p. 54). Further, it is a person’s ability to be able to keep a savings account that matters, and plan ahead. Further, they are “outcome of a certain behaviors of a decision-maker, and the attitude could be embedded through their economic and non-economic beliefs” (Ajzen, 1991). Both the financial, and economic well-being are influenced by financial attitudes through the positive financial behavior (Rai et al., 2019). Moreover, they mentioned that the money attitudes are important to determine the financial literacy levels of the individuals. According to Sabri et al (2020c), money attitude is one of the crucial drivers of financial well-being of the employees in Malaysia. Meanwhile, a negative link between money attitudes, and financial vulnerability was also reported (Poh et al., 2021).

Individuals’ money attitudes also influence their shopping and saving behaviors, which affects the accomplishment of certain life goals (Nga & Yeoh, 2015), and those with productive life goals achieve higher level of economic well-being. Furthermore, the relationship between money attitudes, and economic well-being were revealed several times in different independent surveys (Wijekoon et al., 2021a; 2021b; 2021d). As a result, the following hypothesis was formulated, and investigated in order to determine the association between money attitudes, and economic well-being.
H₃: A positive link exists between money attitude and economic well-being.

Findings of Shih and Ke (2014) suggested that consumers who have positive money attitudes perform high-risk financial judgements. Shim et al (2010); Susilowati and Latifah (2017) found that prediction of financial behavior by money attitudes. Thus, H₄ was formulated.

H₄: A positive link exists between money attitude and financial behavior.

**Financial Behavior**

Financial behavior is “the acquisition, allocation, and use of financial resources oriented toward some goal” (Topa et al., 2018, p. 3). Personal financial behavior can be investigated by looking at how well a person manages cash, savings, debt, and other expenses (Hasibuan et al., 2018). Healthy financial behaviors, for example, effective budgeting and financial stability, promote personal well-being, whereas unhealthy financial behaviors, for instance, relying heavily on credit and loans, have the opposite effect (Atkinson & Messy, 2012). However, Fei et al (2020); Sabri et al (2020a) found a negative link between financial behavior and financial vulnerability, which has a detrimental impact on individual's economic well-being. Empirical research reveals that when families master effective financial management, both of their long-term economic well-being, and financial satisfaction will be improved (Consumer Financial Protection Bureau, 2015).

Furthermore, positive financial behaviors including financial management, savings, and investing are important determinants of financial well-being (Sabri et al., 2020b). Individuals with positive financial behaviors manage their finances better to achieve higher economic well-being (Brilianti & Lutfi, 2020; Wijekoon et al., 2021a; 2021b). However, financial behavior is diverse, which includes wise and cautious money spending, is a valuable safeguard against unsafe financial behaviors (Topa et al., 2018). Hence, based on the discussed evidences, financial behavior positively influences the economic well-being.

H₅: A positive link exists between financial behavior and economic well-being

Furthermore, Banerjee et al (2017) discovered that the favorable influence of financial knowledge on financial awareness which increases the individual’s financial behavior. “People with a low financial risk tolerance have difficulty in making financial decisions, and are unsatisfied with their financial management capabilities” (Sages & Grable, 2009, p. 60), implying that money attitudes, and financial behavior are connected. Moreover, the positive influence of both financial knowledge (Sabri & Falahati, 2013), and money attitudes (Sabri et al., 2020c) on individual well-being was proved by previous studies. Hence, this study assumed the mediation impact of financial behavior on the relationships between financial knowledge, money attitudes, and economic well-being. The related hypotheses are;

H₆: Financial behavior mediates the association between financial knowledge and economic well-being.
H₇: Financial behavior mediates the association between money attitudes and economic well-being.
Therefore, the discussed literature, and suggested hypotheses above helped authors to develop following theoretical framework (Figure 2).

![Figure 2: Family Resource Management Model based theoretical framework for economic well-being](image)

**Research Methodology**

According to the statistics of the Coconut Cultivation Board of Sri Lanka, there are around 30,000 coconut growers in the coconut triangle, and 416 coconut growers from the four (4) regional areas which are belongs to the coconut triangle were selected to collect the data using multi stage random sampling method. In the first stage of multi stage random sampling the coconut triangle was divided into four (4) regional areas which are Gampaha, Kurunegala, Kuliapitiya, and Marawila. At the second stage, four Coconut Development Officer (CDO) ranges were selected randomly from each region. The third stage, the estates were categorized in to four categories according to the extent groups which are introduced by Sri Lanka Coconut Research Institute which were, >0.5-<5 ac., 5-10 ac., >10-50< ac., and >50 ac. Then in the fourth stage, technology adopted (TA) and non-adopted (NA) coconut estates were identified. Finally, duly completed 400 questionnaires were remained after disposing incomplete responses, and responses with outliers.

Authors used both procedural and statistical remedies to combat the potential threat of common method bias in cross-sectional research designs. In terms of procedural design, the survey was created in collaboration with renowned academics who specialize in well-being research. Further, pre-test was conducted to guarantee the clarity, and conciseness of the questionnaire items (Podsakoff et al., 2003).

Data normality was tested, and both the normality parameters; skewness and kurtosis are ranged in between -2 and +2 (Table 1), which indicated that the normal distribution of the data set (George & Mallery, 2003).

| Variables                  | Skewness | Kurtosis |
|----------------------------|----------|----------|
| Financial Knowledge        | 0.710    | -0.587   |
| Financial Behavior         | 0.348    | -1.044   |
| Money Attitudes            | -0.134   | -1.474   |
| Economic Well-Being        | -0.074   | -1.675   |
If the variance inflation factor (VIF) value of a variable is below five, the multicollinearity was not existed (Hair et al., 2014). According to the collinearity statistics, all the VIF values are below five, and the muticollinearity was not detected (Table 2). This revealed that the constructs had a low level of redundancy. Anonymity, and confidentiality were also guaranteed for the respondents.

| Variables               | VIF  |
|-------------------------|------|
| Financial Knowledge     | 1.507|
| Financial Behavior      | 2.520|
| Money Attitudes         | 3.585|
| Economic Well-Being     | 2.653|

SPSS version 26, and PLS-SEM 3.3 were used for descriptive analysis, and path coefficient statistics, respectively. Due to several reasons, PLS-SEM was utilized as a statistical tool to examine the given hypotheses. To begin, PLS-SEM’s primary goal is to estimate target constructs, which is in line with the study’s goal (i.e., to predict the factors influencing economic well-being). Second, the current research includes mediation effects, which can be examined precisely, and simultaneously using PLS-SEM (Henseler et al., 2009). Thirdly, several prior studies related to well-being studies have applied PLS-SEM in their data analysis (Kumar et al., 2021; Tomaselli et al., 2021).

**Instruments**

The questionnaire items of financial knowledge were covered three topics; credit, savings, and general financial knowledge. All 16 of them were "Yes" or "No" statements adapted from (Hogarth and Hilgert, 2002). Financial behavior construct was adapted from Sabri et al (2012), which included 12 five-point Likert scale items ranging from never (1) to extremely often (5). The areas of financial behavior covered were cash management, credit management, retirement planning, real estate planning, and risk management. Ten items were adopted from Furnham's (1984) money attitude scale, which ranged from strongly disagree (1) to strongly agree (5). Finally, a 34-item economic well-being questionnaire was developed based on (Bigot et al., 2017; Diener et al., 1985; Haver et al., 2015; Kinderman et al., 2011; Orsila et al., 2011; Radzyk, 2014). It was rated on a 5-point Likert scale that ranged from completely dissatisfied (1) to completely satisfied (5), and covered all major dimensions of financial well-being.

**Results and Discussion**

Based on the demographics of the respondents approximately three-fourths (73.5%) were male and the rest (26.5%) were female. In terms of the ethnicity, the majority of the growers were Sinhala (92.5%), followed by Muslim (4.2%), and Tamil (3.3%). In terms of religion, Buddhist (73.7%), Catholic (18.7%), Islam (4.3%), and Hinduism (3.3%) were recorded. When considering the age majority of the growers were in the age group of 60-69 (26.0%), trailed by the age groups 50-59 (23.5%), and 41-49 (23.0%) respectively. The mean age of the coconut growers were 55.1 years old. The marital status of the respondents was included; unmarried, married, divorced, and widowed. A total of 85.5% were married, 9.7%, and 2.5% were widowed, and divorced respectively. Only 2.3% was recorded as single. In addition, 19% of
the coconut growers were degree holders, and only 3.5% of them were postgraduates. With respect to the income groups, more than half (60.3%) of the coconut growers earned an income Sri Lankan Rupees (SLR) ≥ 100,001, while 18.3% and 16.8% were fallen under the income category of SLR 75,001 – SLR 100,000, and SLR 50,001 – SLR 75,000, respectively. Only, 0.3% was received ≤SLR 30,000 per month.

**Reflective Measurement Model Assessment**
Checking the indicator loadings, reliability, convergent validity, and discriminant validity are integral parts of the reflective measurement model evaluation. To begin, the data showed that all loadings were more than the cut-off value of 0.7. (Hair et al., 2019). Second, as presented in Table 3, all items had composite reliability (CR) values more than 0.70, showing excellent internal consistency (Hair et al., 2006). Finally, the average variance extracted (AVE) was greater than 0.4 (Fraering & Minor, 2006), which indicated convergent validity of the results.

| Variables            | CR   | AVE  |
|----------------------|------|------|
| Financial Knowledge  | 0.841| 0.423|
| Financial Behavior   | 0.845| 0.414|
| Money Attitudes      | 0.890| 0.604|
| Economic Well-Being  | 0.960| 0.455|

The discriminant validity was assessed using the heterotrait-monotrait ratio (HTMT) (Henseler et al., 2015). According to Kline (2011), if the HTMT ratios are less than 0.85, the discriminant validity is confirmed (Table 4).

|          | EWB | FB  | FK  | MA  |
|----------|-----|-----|-----|-----|
| EWB      |     |     |     |     |
| FB       | 0.831|     |     |     |
| FK       | 0.756| 0.705|     |     |
| MA       | 0.842| 0.843| 0.785|     |

Notes: EWB-Economic Well-being; FB-Financial behavior; FK-Financial Knowledge; MA-Money Attitudes

**Direct Effects**
The direct relationships were investigated using path coefficient analysis via PLS-SEM (Table 6). Growers’ money attitudes (β=0.607) had the strongest and most favorable influence on economic well-being, followed by financial behavior (β=0.242), financial knowledge (β=0.141), and the three factors explained 88.9% of the variance in economic well-being. The impact of money attitudes (β=0.863) was only positively affected on growers’ financial behavior, but the effect of financial knowledge (β=0.028) was not significant. Hence, only H₁, H₃, H₄, and H₅ direct effect hypotheses could be accepted.
Table 6  
Results for direct hypotheses testing

| Hypothesis | Relationship | Std. Beta | Std. Error | t-value | Result |
|------------|--------------|-----------|------------|---------|--------|
| H₁         | FK -> EWB    | 0.141     | 0.028      | 5.008*  | Supported |
| H₂         | FK -> FB     | 0.028     | 0.037      | 0.694ns | Not Supported |
| H₃         | MA -> EWB    | 0.607     | 0.042      | 14.576* | Supported |
| H₄         | MA -> FB     | 0.863     | 0.031      | 27.938* | Supported |
| H₅         | FB -> EWB    | 0.242     | 0.036      | 6.702*  | Supported |

Significant at *p<0.001, ns-non significant, FK- Financial Knowledge, FB- Financial Behavior, MA- Money Attitudes, EWB- Economic Well-Being

According to the accepted hypotheses, financial knowledge, money attitudes, and financial behavior revealed as significant predictors of economic well-being. Some research has found that people’s proclivity to plan has an impact on their economic well-being, and these findings offer insight into how to enhance the link between financial knowledge, and economic well-being (Lee & Kim, 2016). Individuals with stronger financial education make better financial decisions in general (Atkinson & Messy, 2012), and the women with high financial knowledge exhibited enhanced well-being (Zulfiqar & Bilal, 2016). Lee et al (2020) discovered a relationship between financial knowledge and personal well-being. In this regard, financially knowledgeable individuals who make well-informed decisions are critical to the marketplace’s effective and efficient performances (Hilgert & Hogarth, 2003), and their economic well-being is higher. As a result, the link between growers’ financial knowledge, and their economic well-being could be established.

A number of empirical research have found a statistically significant relationship between financial behavior, and economic well-being (Wijekoon et al., 2021a; 2021b; 2021c). The positive correlation between financial behavior, and economic well-being was further confirmed by the results of this study. Indeed, one’s money attitudes will influence their spending and saving habits, as well as the achievement of particular life goals (Nga & Yeoh, 2015). Individuals achieve life fulfillment when they set fruitful life goals. Furthermore, Gasiorowska (2015); Sabri et al (2020c) found a significant relationship between money attitude, and financial well-being in their investigations. Moreover, in their recent publications, Wijekoon et al (2021a; 2021b) found a positive significant impact of money attitudes on economic well-being. As a result, the accepted hypothesis; H₃ was validated further.

For a person’s and his family’s financial prosperity, a certain level of financial education is obligatory (Rai et al., 2019). If one’s money management is poor, his/her is vulnerable to financial catastrophes. Hence, financial knowledge positively influences the individual financial behavior (Tang et al., 2015), which is contradicted to the current findings that revealed non-significant association between financial knowledge, and financial behavior. Even though high financial knowledge was recorded among Sri Lankan coconut growers, the current result might be due to not performing the positive financial behaviors by them.

Money attitude is a personal inclination towards financial matters, and significantly affects for one's financial behavior. According to Bhushan and Medury (2014), in order to enhance
financial literacy, and healthy financial habits among generations, it is critical to focus on developing favorable money attitudes among the population of a country. Money attitudes, according to Ajzen (1991), are the product of a decision-specific maker’s behavior, and the attitude might be embedded in both economic and non-economic views. As a result, the current finding of a positive link between money attitudes and financial behavior was confirmed.

**Indirect Effects (Mediation)**

As described by Hair et al (2017), 5000 subsamples were bootstrapped to reveal the indirect effect of the framework, and 95% bias-corrected confidence interval was checked (see the Figure 3). Table 7 shows that one of the two mediation paths was deemed to be significant because the confidence intervals did not straddle a 0 in the middle. Thus, financial behavior mediated only the connection between money attitudes, and economic well-being. Hence, only H\textsubscript{7} was accepted.

| Hypothesis | Relationship | Std. Beta | 95% bias-corrected CI | t-value | Result |
|------------|--------------|-----------|-----------------------|---------|--------|
| H\textsubscript{6} | FK -> FB -> EWB | 0.007 | [-0.012, 0.026] | 0.665\textsuperscript{ns} | Not Supported |
| H\textsubscript{7} | MA -> FB -> EWB | 0.209 | [0.147, 0.270] | 6.603* | Supported |

Significant at *p<0.001, CI-Confidence Interval, ns-non significant, FK- Financial Knowledge, FB- Financial behavior, MA- Money Attitudes, EWB- Economic Well-Being

Furthermore, when students have a favorable attitude toward money, they engage in healthy financial behaviors, and their financial well-being is also higher (Gutter & Copur, 2011). Through financial behavior, both the financial knowledge, and money attitude have a positive effect on financial well-being (Setiyan & Solichatun, 2019). However, the mediation effect of financial behavior on the association between financial knowledge, and economic well-being in the current study was contradicted with the findings of (Setiyan and Solichatun, 2019). Even though, financial knowledge was reported to have a positive relationship with financial well-being (Selvia et al., 2021), both the relationships of financial knowledge on financial behavior (Borden et al., 2008), and financial behavior on financial well-being (Osman et al., 2018) were revealed insignificant previously. Therefore, the non-significant relationship between financial knowledge, and economic well-being via financial behavior could be proved.

This is the first study, to the best of the researchers’ knowledge, to look at financial behavior as a mediator in the association between financial knowledge and money attitudes, and economic well-being. As a result, the current research adds to the scientific literature in the field of family economics and management, both theoretically and practically.
Conclusion and Recommendations
Overall, five of the seven hypotheses assessed were empirically validated, as hypothesized in the study framework. As a result, the current research offers empirical evidence that financial behavior, financial knowledge, and money attitudes have a significant impact on Sri Lankan coconut growers’ economic well-being. In addition, 88.9% of the variance in economic well-being was clarified. Money attitude ($\beta = 0.607, t = 14.576, p < 0.001$) has the biggest influence among all the characteristics directly associated to economic well-being in the proposed model, followed by financial behavior ($\beta = 0.242, t = 6.702, p < 0.001$), and financial knowledge ($\beta = 0.141, t = 5.008, p < 0.001$).

Further, money attitude, and financial behavior was positively linked ($\beta = 0.863, t = 27.938, p < 0.001$), while the relationship between financial knowledge, and financial behavior was insignificant ($\beta = 0.028, t = 0.694, p > 0.05$). The 78.2% of variance in financial behavior was also clarified by coconut growers’ money attitudes. The links between money attitudes, financial knowledge, and economic well-being was hypothesized as positive through financial
behavior, however the prediction that financial behavior would mediate the link between financial knowledge, and economic well-being was not supported. Moreover, the results revealed that the FRMM fitted well to the study, because the resources, for example, money attitudes of individuals of a family is important for their good financial behaviors (throughput), and gives the output (economic well-being) which is significant for the overall well-being of the family.

This research was restricted to the financial knowledge and money attitudes of economic well-being, and therefore, additional scale development is warranted to create measures of other specific aspects of economic well-being. Then it would be possible to identify variables associated with specific dimensions of economic well-being other than financial aspect, as well as with the global measure, of this concept. In addition, the findings of this study are restricted to Sri Lankan coconut growers in this sample, and a sample with different populations might give dissimilar results. As a result, further research on the relationship between economic well-being drivers, and individual economic well-being should be undertaken utilizing a sample of all farmers in the agricultural sector whose fields are distinct from those studied in this study. Due to the cross-sectional character of this study, the authors are unable to make any casual statements or evaluate the relationships between the investigated antecedents, and economic well-being over time. To perform a true causal evaluation of the impact of individual economic well-being, research designs that allow for causal inference are required. As a result, future research should study the links between economic well-being drivers, and individual economic well-being across time using a longitudinal methodology. Furthermore, future research should build on this work by constructing and testing integrated, complete models in order to capture a more holistic understanding of the underlying causes of economic well-being.

Furthermore, because the ratio of male to female coconut growers in Sri Lanka is 3:1, gender-specific awareness programs might be effective to enhance the growers’ economic well-being (Sabri & Wijekoon, 2019). Furthermore, as Sabri et al (2019) argue, gamification and edutainment incorporated tools like Smart Money Kits could be an excellent way to improve children’s money attitudes, financial knowledge, and financial behavior in order to help them grow into financially responsible individuals in the future. Furthermore, because financial factors have a significant impact on poverty (Wijekoon et al., 2021e), the findings of this study will make it easier for policymakers to plan and evaluate poverty alleviation programs, and policies, particularly for low- and middle-income people, in order to enhance their overall well-being.

Acknowledgements
“The authors acknowledge the financial assistance given by the Sri Lanka Council of Agricultural Research Policy (SLCARP Capacity Building Program 2018-2022), and Sri Lanka Coconut Research Institute for the resources given for the data collection”.

43
References

Ahmad, H. H., Abdullah, H., & Samsudin, S. (2016). The linkages between household consumption and household debt composition in Malaysia. *International Journal of Economics and Financial Issues, 6*(4), 1354-1359.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Almenberg, J., Lusardi, A., Save-Soderbergh, J., & Vestman, R. (2019). *Attitudes Toward Debt and Debt Behavior*. NBER Working Paper No. 24935. JEL No. D14, D15, D91.

Atkinson, A., & Messy, F. A. (2012). Measuring financial literacy: Results of the OECD. *OECD working papers on finance, insurance and private pensions, 44*(2), 296–316.

Banerjee, A., Kumar, K., & Philip, D. (2017). Financial literacy, awareness and inclusion. Retrieved on 08/10/2021 from https://scholar.google.co.in/scholar?hl=en&as_sdt=0%2C5&q=Banerjee%2C+Kumar%2C+and+Philip+%282017%29+financial+literacy&btnG=

Bhushan, P., & Medury, Y. (2014). An empirical analysis of inter linkages between financial attitudes, financial behavior and financial knowledge of salaried individuals. *Indian Journal of Commerce and Management Studies, 5*(3), 58-64.

Bigot, F., Castanon, E., Baldini, C., Hollebecque, A., Carmona, A., Postel-Vinay, S., Angevin, E., Armand, J.-P., Ribrag, V., Aspeslagh, S., & others. (2017). Prospective validation of a prognostic score for patients in immunotherapy phase I trials: The Gustave Roussy Immune Score (GRIm-Score). *European Journal of Cancer, 84*, 212–218. https://doi.org/10.1016/j.ejca.2017.07.027

Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008). Changing college students’ financial knowledge, attitudes, and behavior through seminar participation. *Journal of Family Economic Issues, 29*(1), 23-40. https://doi.org/10.1007/s10834-007-9087-2

Brillianti, T. R., & Lutfi, L. (2020). Pengaruh pendapatan, pengalaman keuangan dan pengetahuan keuangan terhadap perilaku keuangan keluarga di kota Madiun. *Journal of Business and Banking, 9*(2).

Brugnoli, A., Folloni, G., & Modena, F. (2009). *Multidimensional economic well-being. Is it measurable? The case of Lombardy*(No. 0910). Public policies and local development. Retrieved on 07/04/2022 from https://core.ac.uk/download/pdf/6234468.pdf

Central Bank of Sri Lanka. (2019). *Annual Report*, Central Bank of Sri Lanka, Janadhipathi Mawatha, Colombo 01.

Clark, R., & D’Ambrosio, M. (2008). Adjusting retirement goals and saving behavior: The role of financial education. In: Lusardi, A. (Ed.), *Overcoming the saving slump: How to increase the effectiveness of financial education and saving program*. Chicago: University of Chicago Press.

Consumer Financial Protection Bureau. (2015). *Financial well-being: The goal of financial education*. Retrieved on 31/08/2021 from https://www.consumerfinance.gov/data-research/research-reports/financial-well-being

Deacon, R. E. & Firebaugh, F. M. (1988). *Family Resource Management: Principles and applications*. (2nd ed.). Needham Heights, MA: Allyn and Bacon.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75.

Fei, C., Sabri, M. F., Mohamed, N. A., Wijekoon, R., & Majid, A. Z. A. (2020). Determinants of financial vulnerability. *Journal of Critical Reviews, 7*(15), 3097–3107.
Fraering, M., & Minor, M. S. (2006). Sense of community: An exploratory study of US consumers of financial services. *International Journal of Bank Marketing, 24*(5), 284-306. https://doi.org/10.1108/02652320610681738

Furnham, A. (1984). Many sides of the coin: The psychology of money usage. *Personality and Individual Differences, 5*(5), 501–509.

Gasiorowska, A. (2015). The impact of money attitudes on the relationship between income and financial satisfaction. *Polish Psychological Bulletin, 46*(2), 197-208.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference* (4th ed.). Allyn & Bacon.

Goldsmith, E. (2005). *Resource management for individuals and families*. Belmont, CA: Wadsworth.

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*(4), 699–714.

Hair, J. F. Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). A Primer on partial least squares structural equation modeling (PLS-SEM). *European Journal of Tourism Research, 6*(2), 211–213.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Pearson Education.

Haver, A., Akerjordet, K., Caputi, P., Magee, C., & Furunes, T. (2015). Measuring mental well-being: A validation of the Short Warwick–Edinburgh Mental Well-Being Scale in Norwegian and Swedish. *Scandinavian Journal of Public Health, 43*(7), 721–727. https://doi.org/10.1177/1403494815588862

Hayhoe, C. R., Cho, S. H., DeVaney, S. A., Worthy, S. L., Kim, J., & Gorham, E. (2012). How do distrust and anxiety affect saving behavior? *Family and Consumer Sciences Research Journal, 41*(1), 69-85. https://doi.org/10.1111/j.1552-3934.2012.02129.x

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Emerald Group Publishing Limited.

Hilgert, M. A., & Hogarth, J. M. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin, 88*, 309-322.

Hogarth, J. M., & Hilgert, M. A. (2002). Financial knowledge, experience and learning preference: preliminary results from a survey on financial literacy. *Journal of Family and Consumer Sciences, 48*, 1–7.

Kholilah, N. A., & Iramani, R. (2013). Studi financial management behavior pada masyarakat Surabaya. *Journal of Business and Banking, 3*(1), 69. https://doi.org/10.14414/jbb.v3i1.255
Kinderman, P., Schwannauer, M., Pontin, E., & Tai, S. (2011). The development and validation of a general measure of well-being: the BBC well-being scale. *Quality of Life Research, 20*(7), 1035–1042.

Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. In The SAGE handbook of innovation in social research methods (pp. 562-589). SAGE Publications Ltd.

Kumar, A., Mohapatra, M., & Dhir, S. (2021). Linking personality with contextual performance through subjective well-being using PLS SEM modelling. *Global Business Review, 09721509211030360*, 1-15. https://doi.org/10.1177/09721509211030360

Lee, J. M., & Kim, K. T. (2016). The role of propensity to plan on retirement savings and asset accumulation. *Family and Consumer Sciences Research Journal, 45*(1), 34–48. https://doi.org/10.1111/ fcsr.12179

Lee, J. M., Lee, J., & Kim, K. T. (2020). Consumer financial well-being: Knowledge is not enough. *Journal of Family and Economic Issues, 41*(2), 218–228. https://doi.org/10.1007/s10834-019-09649-9

Lusardi, A., & Mitchell, O. S. (2007). Baby boomer retirement security: the role of planning, financial literacy, and housing wealth. *Journal of Monetary Economics, 54*, 205-224. https://doi.org/10.1016/j.jmoneco.2006.12.001

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs, 44*(2), 358-380. doi.org/10.1111/j.1745-6606.2010.01173.x

Mimura, Y. (2014). The relationship between life satisfaction among wives and financial preparedness of households in Japan. *Journal of Family and Economic Issues, 35*(4), 532-541. https://doi.org/10.1007/s10834-014-9390-7

Mimura, Y., Cai, Y., Tonyan, H., & Koonce, J. (2019). Resource well-being among family child care business owners. *Journal of Family and Economic Issues, 40*(3), 408-422. https://doi.org/10.1007/s10834-019-09620-8

Nga, K. H., & Yeoh, K. K. (2015). Affective, social and cognitive antecedents of attitude towards money among undergraduate students: A Malaysian study. *Pertanika Journal of Social Sciences & Humanities, 23*, 161-179.

OECD. (2011). *Development co-operation report 2011*. Retrieved on 25/03/2022 from https://www.oecd.org/dac/developmentco-operationreport2011.htm.

OECD. (2013). “Economic well-being”, in OECD framework for statistics on the distribution of household income, consumption and wealth. Retrieved on 31/03/2022 from https://doi.org/10.1787/9789264194830-5-en

OECD. (2015). How's Life? 2015, Measuring well-being. Retrieved on 5/6/2020 from https://www.oecd-ilibrary.org/docserver/c7adaf59_en.pdf?expires=15913592 49&id=id& acc name=guest& checksum=454037E8B6307E66FA387E515094888

OECD. (2019). *The economy of well-being: Creating opportunities for people’s well-being and economic growth*. SDD Working paper No. 102. Retrieved on 06/0/2022 from https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=SDD/DOC (2019)2&docLanguage=En

Orsila, R., Luukkaala, T., Luukkaala, T., Manka, M. L., & Nygard, C. H. (2011). A new approach to measuring work-related well-being. *International Journal of Occupational Safety and Ergonomics, 17*(4), 341–359. https://doi.org/10.1080/ 10803548.2011.11076900

Osman, Z., Madzlan, E. M., & Ing, P. (2018). In pursuit of financial well-being: The effects of financial literacy, financial behavior and financial stress on employees in
Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of applied psychology, 88*(5), 879-903.

Poh, L. M., Sabri, M. F., Wahab, H. A. R. A., & Wijekoon, R. (2021). Determinants of financial vulnerability among civil servants in Peninsular Malaysia. *Malaysian Journal of Consumer and Family Economics, 27*, 113–143.

Radzyk, J. (2014). Validation of a new social well-being questionnaire. 18–21.

Rai, K., Dua, S., & Yadav, M. (2019). Association of financial attitude, financial behavior and financial knowledge towards financial literacy: A structural equation modeling approach. *FIIB Business Review, 8*(1), 51-60. https://doi.org/10.1177/2319714519826651

Robb, C. A., & Woodyard, A. S. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning, 22*(1), 60-70.

Sabri, M. F., & Falahati, L. F. (2013). Predictors of financial well-being among Malaysian employees: Examining the mediate effect of financial stress. *Journal of Emerging Economies and Islamic Research, 1*(3), 61–76. https://doi.org/10.24191/jeeir.v1i3.9130

Sabri, M. F., & Wijekoon, R. (2019). The influence of gender and ethnicity on young adults’ participation in financial education program. *Journal of Management and Sustainability, 9*(1), 159-170. https://doi.org/ 10.5539/jms. v9n1p159

Sabri, M. F., Wijekoon, R., Ramli, N. N., & Dass, T. M. (2019). The impact of smart money kit on children’s financial knowledge, attitude and behavior. Journal of Social Sciences and Humanities, 3, 48-59.

Sabri, M. F., Abd Rahim, H., Wijekoon, R., Fardini, N., Zakaria, A. S. M., & Reza, T. S. (2020b). The mediating effect of money attitude on association between financial literacy, financial behavior, and financial vulnerability, *International Journal of Academic Research in Business and Social Sciences, 10*(15), 340-358.

Sabri, M. F., Cook, C. C., & Gudmunson, C. G. (2012). Financial well-being of Malaysian college students. *Asian Education and Development Studies, 5*(1), 153-170.

Sabri, M. F., Reza, T. S., & Wijekoon, R. (2020a). Financial management, savings and investment behavior and financial well-being of working women in the public sector. *Majalah Ilmiah Bijak, 17*(2), 135–153. https://doi.org/10.31334/bijak.v17i2.1008

Sabri, M. F., Wijekoon, R., & Rahim, H. A. (2020c). The influence of money attitude, financial practices, self-efficacy and emotion coping on employees’ financial well-being. *Management Science Letters, 10*(4), 889–900. https://doi.org/10.5267/j.msl.2019.10.007

Sages, R. A., & Grable, J. E. (2009). Financial numeracy, net worth, and financial management skills: Client characteristics that differ based on financial risk tolerance. *Journal of Financial Service Professionals, 64*(6), 57–65.

Selvia, G., Rahmayanti, D., Afandy, C., & Zoraya, I. (2021). The effect of financial knowledge, financial behavior and financial inclusion on financial well-being, In: BISC 2020, 3-4 October 2020, Bengkulu, Indonesia, 1-14. https://doi.org/10.4108/ eai.3-10-2020.2306600

Setiyani, R., & Solichatun, I. (2019). Financial well-being of college students: An empirical study on mediation effect of financial behavior. *KnE Social Sciences, 451*-474. https://doi.org/10.18502/kss.v3i11.4026
Shih, T. Y., & Ke, S. C. (2014). Determinates of financial behavior: insights into consumer money attitudes and financial literacy. *Service Business, 8*(2), 217-238. https://doi.org/10.1007/s11628-013-0194-x

Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of youth and adolescence, 39*(12), 1457-1470. https://doi.org/10.1007%252Fs10964-009-9432-x

Susilowati, N., & Latifah, L. (2017). College student financial behavior: An empirical study on the mediating effect of attitude toward money. *Advanced Science Letters, 23*(8), 7468-7472.

Tang, N., & Baker, A. (2016). Self-esteem, financial knowledge and financial behavior. *Journal of Economic Psychology, 54*, 164-176. https://doi.org/10.1016/j.joep.2016.04.005

Tang, N., Baker, A., & Peter, P. C. (2015). Investigating the disconnect between financial knowledge and behavior: The role of parental influence and psychological characteristics in responsible financial behaviors among young adults. *Journal of Consumer Affairs, 49*(2), 376-406. https://doi.org/10.1111/joca.12069

Tomaselli, V., Fordellone, M., & Vichi, M. (2021). Building well-being composite indicator for micro-territorial areas through PLS-SEM and K-Means approach. *Social Indicators Research, 153*(2), 407-429. https://doi.org/10.1007/s11205-020-02454-0

Topa, G., Hernandez-Solis, M., & Zappala, S. (2018). Financial management behavior among young adults: the role of need for cognitive closure in a three-wave moderated mediation model. *Frontiers in Psychology, 9*(NOV), 1–10. https://doi.org/10.3389/fpsyg.2018.02419

Wijekoon, R., Sabri, M. F., Ahmad, N., Rahim, H. A., & Suhaimi, S. S. A. (2021a). Financial factors as antecedents of economic well-being and mediation effect of technology adoption. *Jurnal Pengguna Malaysia, 37*, 148–171.

Wijekoon, R., Sabri, M. F., Ahmad, N., & Rahim, H. A. (2021b). Understanding the path toward family economic well-being of coconut growers. *International Journal of Academic Research in Business and Social Sciences, 11*(19), 327–348, http://dx.doi.org/10.6007/IJARBSS/v11-i19/11740.

Wijekoon, R., Sabri, M. F., Ahmad, N., & Rahim, H. A. (2021c). Mediation effect of technology adoption between financial factors and economic well-being. In A. L. K. Abdullah, H. A. Rahman, J. L. D'Silva, N. A. Kamarudin (Eds), Proceedings of the Conference on Youth and Community Issues; Series 2/2021 (pp. 225-231), Serdang, Malaysia: University Putra Malaysia.

Wijekoon, R., Sabri, M. F., Ahmad, N., & Rahim, H. A. (2021d). The impact of financial knowledge, money attitude on economic well-being with the mediating effect of financial behavior. Proceedings of the Conference on Consumer, Family and Business Agility in Crisis, Serdang, Malaysia: University Putra Malaysia.

Wijekoon, R., Sabri, M. F., & Paim, L. (2021e). Poverty: A literature review of the concept, measurements, causes and the way forward. *International Journal of Academic Research in Business and Social Sciences, 11*(15), 39–111. https://doi.org/10.6007/IJARBSS/v11-i15/10637

Xiao, J. J. (2013). Family economic well-being. In *Handbook of marriage and the family* (pp. 573–611). Springer, Boston, MA.

Zulfiqar, M., & Bilal, M. (2016). Financial wellbeing is the goal of financial literacy. *Research Journal of Finance and Accounting, 7*(11), 94–103.