

# FINANCIAL LITERACY, CAPABILITY AND FINANCIAL WELL-BEING OF LOW-INCOME GROUP YOUNG ADULTS IN MALAYSIA

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**ABSTRACT:** This study aimed to examine the effect of low-income group young adults' financial literacy on their financial well-being, and to assess the moderating effect of capability on the relationship between low-income group young adults' financial literacy and their financial well-being. This study surveyed 300 low-income group young adults in Malaysia. The results showed that financial literacy, in terms of financial attitude, had a significant positive effect on the financial well-being of low-income group young adults. Financial behavior as a measure of financial literacy, however, did not affect the financial well-being of low-income group young adults. Nevertheless, financial knowledge as a measure of financial literacy had a significant negative effect on the financial well-being of low-income group young adults. Additionally, capability had a significant negative moderating effect on the relationship between financial literacy (in terms of financial knowledge) and the financial well-being of low-income group young adults. The results of this study are essential as they offered important findings for relevant parties to develop ways to enhance the financial well-being of low-income group young adults in Malaysia.

**Keywords:** Financial literacy, financial well-being, low-income group, young adults, capability

## 1. INTRODUCTION

'Financial well-being' (FWB) is a feeling of having a stable financial status, being content, and free from anxiety [1]. According to Joo [1] FWB is typically based on a subjective assessment of a person's financial situation. It is an essential element that influences an individual's well-being [2]. Disruption in their FWB, however, may have long-term consequences on their psychological, emotional, and relational well-being[3]. One of the nation's top priorities is to improve the financial situation of the people. The subject of FWB has drawn a lot of attention, particularly since the COVID-19 outbreak, which hurt many people's well-being. Specifically, this outbreak's effects on the nation had a major impact on many people, including young adults' finances. Young adults are important assets to a country as they serve as a vital foundation for the future development of a country with their energy, talent, and creativity to the country's economy [4]. The Malaysia National Strategy for Financial Literacy 2019-2023 [5] addressed financial vulnerabilities in selected societal groups, as well as young adults. Sabri *et al.* [6] indicated that young adulthood is a period when proper financial literacy (FL), in particular, will assist them in developing behavioral intentions, such as FWB. Due to their lack of financial knowledge and early lack of savings habits, young adults are more likely to encounter financial difficulties in the future [7]. Many young adults are unaware of the fundamentals of money management [6]. This is evident in the Credit Counselling and Debt Management Agency (AKPK) [8] where 15% of young people who signed up for the AKPK's debt management program expressed concerns about their poor financial management. In addition, 50% of them were credit card debtors who had already filed for bankruptcy [8].

Bank Negara Malaysia [9], reported low-income households tend to have lower levels of FL. Sabri *et al.* [10] revealed that FL influences FWB of the young adults. Increasing FL is essential to ensure the FWB of lower-income group people [11]. In Malaysia, the low-income group is known as Bottom 40 (B40) households with an income below RM4,850. There

were four B40 sub-groups: (i) B1: an income of less than RM2,500; (ii) B2: an income that ranged between RM2,500 – RM3,169; (iii) B3: an income that ranged from RM3,170 – RM3,969; and (iv) B4: an income that ranged from RM3,970 – RM4,850. This group is at risk because they frequently have setbacks in money, housing, health, employment, and other major life elements [12]. It is therefore essential for young adults, specifically in low-income groups, to have a strong FWB level which potentially reflects a good quality of life to better serve the nation. Additionally, from the capability view, it is predicted that low-income group young adults who are financially literate and with high capability to function may enhance their FWB. Hence, an understanding of low-income group young adults' FWB by focusing on FL and capability is worth looking at more closely. Moreover, evidence regarding the low-income group of young adults' FL and FWB within the capability view is rather limited. Thus, this study addressed two research questions: (1) How does low-income group young adults' FL influence their FWB?, and (2) How does capability moderate the relationship between low-income group young adults' FL and FWB? Two research objectives were subsequently framed to answer these questions: (1) to examine the effect of low-income group young adults' FL on their FWB, and (2) to assess the moderating effect of capability on the relationship between low-income group young adults' FL and their FWB.

The subsequent sections presented a literature review and hypotheses, followed by the research method. Next, the results were explained, and a discussion of the findings was elaborated. Finally, the conclusion of the study was presented.

## 2. LITERATURE REVIEW

### 2.1. Financial Well-being and Young Adults

Several studies attempted to explain how young people or young adults might improve their FWB. Arnett [13] suggested that young adults are individuals between the ages of 18–25 years old, a distinct period that known as emerging adulthood. According to Arnett [13], "Having left the dependency of childhood and adolescence, and having not yet

entered the enduring responsibilities that are normative in adulthood, emerging adults often explore a variety of possible life directions in love, work, and worldviews” (p. 469). The process of transition also considers financial independence for self-sufficiency in emerging adults that helps them to become adults. Furthermore, Brüggén *et al.* [14] believed that young adults between the ages of 20 and 30 are particularly vulnerable to financial threats. Many at this age manage their finances independently, start working for a wage, and use their credit cards [15].

Sabri *et al.* [10] also examined the FWB of college students and identified its determinants. College students who have greater childhood experience, FL and financial socialization were more likely to have high FWB. In addition, students who stayed on campus perceived their FWB better than off-campus friends because students who live on campus usually have fewer financial obligations and liabilities than those who live off campus. Consequently, in the long term, some college students who face financial stress may also have a severe impact on their psychological well-being, relationships with others and their families, and their prospects of successfully transitioning to adulthood [16].

Abdullah *et al.* [17] revealed young workers may struggle to manage their finances and may find it difficult to plan for the future. However, the respondents had no hardship to get RM1,000 in case of financial emergency because they might have savings for that purpose. In another study on young employees' FWB in Malaysia, Sabri and Zakaria [18] revealed that there was a positive relationship between income and FWB. Higher-income might help people more easily fulfill their necessities and social benefits. Therefore, increasing household income is linked to better FWB which could help them to meet any unexpected circumstances. Moreover, emerging adults who can view their financial future favorably are likely to feel capable of effectively managing their current financial situation. It motivates them to have a positive life facing challenges in the transition towards adulthood [19]. Their study proved the positive perception of emerging adults' FWB and life satisfaction. For young adults who are unable to achieve financial stability, they will start planning for retirement and earning more money when they get older [20].

As there was a paucity of literature, notably in Malaysia, discussing low-income group young adults' FWB, this study is timely to provide evidence on the topic, especially in the context of developing countries.

## 2.2. Financial Literacy and Young Adults

FL is essential as knowledge and skills to manage money effectively allow individuals to make more informed decisions, accumulate wealth, and adopt healthy financial practices that will lead to financial stability. Several studies, e.g., Garg & Singh [21], and Mändmaa, [22] offered evidence of FL in young adults. Literature suggested that FL comprised three dimensions: financial knowledge, financial attitude, and financial behavior. To understand the interrelationship between financial knowledge, financial attitude, and financial behavior, Garg and Singh [21], analyzed the literature on FL amongst youth in the world. Based on their analysis, they discovered that the FL level amongst youth is low across most parts of the world. The

study specifically revealed that there exists an interrelationship between financial knowledge, financial attitude, and financial behavior that translates into sound financial decisions and ultimately achieves individual FWB. The study also discovered a significant relationship between various socioeconomic and demographic factors, such as age, gender, income, marital status, and educational accomplishment on the level of FL of youth. A study conducted by Mändmaa [22] on 522 young students in Estonia found that students are not knowledgeable about personal finance and this financial illiterate limits their ability to make informed financial decisions.

In Malaysia, a few studies have investigated the LF of young adults. Yong *et al.* [23] investigated the relationship between financial knowledge, attitude, behavior, and FL among young working adults in Malaysia. The results revealed that financial education positively influenced financial knowledge which in turn, significantly predicted both financial attitude and behavior. Attitude was found to partially mediate the effect of knowledge on behaviour and hence, youths need to have a positive financial attitude to benefit from financial knowledge. The analysis also revealed that financial behavior was observed to be lower amongst young working adults. Therefore, it can be concluded that financial behavior can be improved with better financial knowledge and financial attitude. This emphasises the essential need to provide adequate financial education to youth as well a gradual change of attitude is recommended for immediate action. On the other hand, Hashim *et al.* [24], who examined the relationship between financial knowledge, financial behavior, financial attitude, and the influence of family on FL among youth in Malaysia found that the level of FL among youth was moderate. From a different perspective, a few researchers such as Agnew and Harrison [25], found that male university students are more financially literate than female students.

Amran *et al.* [26] revealed that the current level of FL amongst households aged between 16 years old and above are low to moderate level with less than 50% of the respondents achieving high literacy score of financial knowledge. This financial illiterate led to several pitfalls, such as poor spending, hard-to-make financial-related decisions for savings and retirement planning, and other negative consequences. The study also discovered that female respondents have a much lower level of financial knowledge than male respondents. Meanwhile, a study conducted by Kamel and Sahid [27] examined the relationship between FL and the financial behavior of public university undergraduate students in Malaysia. The findings revealed a significant relationship between FL and financial behavior. Students who exhibited high FL tend to have well-managed financial behaviors. The study suggested the most effective way to improve the students' FL is by expanding their financial knowledge through financial education and financial attitudes.

Undoubtedly, there have not been many studies on the FL of young adults in low-income groups in Malaysia. The purpose of this study is therefore timely to investigate the FL of low-income group young adults, particularly in developing countries, and how it affects their FWB.

### 3. HYPOTHESES

#### 3.1. Financial Literacy Versus Financial Well-being of Young Adults

FL strengthens people's ability to use resources efficiently, manage their budgets, and access financial services, which promotes economic growth [28]. Limited studies investigated the impact of FL on the FWB of young adults. Gutter and Copur [[15], found that young adults among college students above 18 years old have moderate FWB about their finances. They found that FL, in terms of financial behavior (savings, budgeting, risky credit card behaviors, and compulsive buying) and financial attitude were significantly positively correlated to FWB. Young adults with problematic behavior, such as excessive use of credit cards and online buying may contribute to a low FWB [29, 30]. Philippas and Avdoulas [31], revealed that FL is a main factor of FWB amongst Greek university students and financial education is required to address future financial challenges. Utkarsh *et al.* [7], however, discovered that FL is not a major factor in improving the FWB of young adults.

In Malaysia, Sabri *et al.* [[10] who examined FWB of college students advocated that those who have greater FL, amongst others, were more likely to have high FWB. Furthermore, Sabri *et al.* [6] found that young adults, aged between 18 and 35 years old from low-income households in Malaysia who have better financial behaviors and financial knowledge would have greater perceived FWB. This study predicted that FL is crucial for young adults, particularly the low-income group of young adults, to demonstrate their potential for future financial resilience. The more financially literate the low-income group of young adults, the stronger their FWB. Specifically, the positive financial attitude exhibited by the low-income group of young adults would improve their FWB. Moreover, the FWB of young adults from the low-income group would be strengthened by better or prudent financial behavior. Furthermore, greater financial knowledge possessed by the low-income group of young adults would enhance their FWB. This indicates that the young adults in the low-income group would be better able to manage their finances effectively for future planning, such as income and debt, if they had more financial knowledge. The following hypotheses were put out by this study in light of the aforementioned discussion:

- H1: Financial attitude has a positive effect on the FWB of low-income group young adults.
- H2: Financial behavior has a positive effect on the FWB of low-income group young adults.
- H3: Financial knowledge has a positive effect on FWB of low-income group young adults.

#### 3.2. Capability View

The capability view to human welfare and well-being was first articulated by Sen [32]. It focused on people's functioning and their capabilities. Functioning describes what a person actually does and goes through. While capabilities refer to what people can do or be, that is the opportunity they have to achieve various lifestyles [33]. This view has been used in a variety of domains, including macroeconomics and

FL [34]. Later, Nussbaum [35], improved this strategy by introducing a more comprehensive capabilities strategy. She suggested ten areas of capability, including: (i) life, (ii) bodily health, (iii) bodily integrity, (iv) senses, imagination, and thought, (v) emotions, (vi) practical reason, (vii) affiliation, (viii) other species, (ix), play, and (x) control over one's environment.

Most studies in financial-related areas used a more focused capability context, that is financial capability. For instance, in their study on young children in low-income families, Shibikom [36], utilized financial knowledge and financial inclusion as measures of financial capability. The study discovered that both financial knowledge and financial inclusion were associated with developmental resources for young children rather than money management. According to Potocki [37], FL and financial inclusion were vital in determining the low-income group's financial capabilities. Utilizing a capability view, Bowman and Wickramasinghe [38], suggested a multifaceted framework that adopted a capability view for comprehending and achieving economic stability for low-income single mothers and their kids. Bowman *et al.* [34], provided a conceptual overview of the factors that formed FWB and people's ability to experience economic security based on capability view. In the meantime, Brown and Bowman [39], created an FWB framework utilizing capability view. The framework was based on the economic dignity notion, which encompassed the causes, effects, and experiences of economic insecurity.

The capability view was employed in this study to explain how the capabilities of young adults from low-income groups influenced the relationship between their FL and FWB. The study also concentrated on FL as the function and capability, in terms of possibilities to access financial-related concerns, including learning about money matters, seeking financial counsel, or using financial management tools. This study hypothesized that the low-income group of young adults' capabilities to function and high FL levels may improve their FWB. For instance, if young adults from the low-income group are viewed as being financially literate because they have free access to financial affairs, or feel no discrimination when accessing financial matters, this will improve their FWB. That is, the more the young adults were capable of functioning in their lives, such as believing they had access to financial matters, or were not subject to discrimination to access financial-related matters, along with the high level of FL, the greater their FWB. Specifically, this study predicted that capability positively moderates the relationship between FL, in terms of financial attitude, financial behavior, and financial knowledge, and FWB of the low-income group of young adults. That higher capability level will strengthen the relationship between FL, in terms of financial attitude, financial behavior, financial knowledge, and FWB of the low-income group of young adults. Following the above discussion, the next hypotheses were put forth:

- H4: Capability moderates the relationship between financial attitude and FWB of low-income group young adults.

- H5: Capability moderates the relationship between financial behavior and FWB of low-income group young adults.
- H6: Capability moderates the relationship between financial knowledge and FWB of low-income group young adults.

#### 4. RESEARCH METHOD

##### 4.1. Research Design and Sample

A survey was conducted to collect data for this study. The sample of this study was low-income group young adults, and the sample size was 300. The sample was used as the exact population of low-income group young adults was unknown. A computed sample size by G-power was 107, hence the established sample size, 300, was considered adequate. Due to the movement control order because of the COVID-19 pandemic, self-administered data collection was not able to be performed. Hence, an online survey was adopted, and the sample was represented by: (i) young graduates, and (ii) students, from higher learning institutions who were between the age of 18 to 24 years old (Mathews, 2010)[40] with household income within below RM4,850 per month (B40 category) [41]. Young graduates were used as they had just entered the workforce, a period when they had learned how to manage income [5]. Alumni Office of the respective higher learning institutions were contacted to get their help in distributing the online survey; while for the students, various social media networks were used to approach the targeted respondents. The online survey was distributed over six months starting from June 2021.

##### 4.2. Research Instrument

All variables of this study were constructed from a questionnaire that was developed from an extensive review of the FL, capability, and FWB literature. The FWB was measured by InCharge Financial Distress/FWB (IFDFW) Scale 1 [42], while FL was measured based on OECD [43] and Potrich *et al.* [44]. Financial attitude, financial conduct, and financial knowledge were the three categories used to classify the FL. On the other hand, capability was measured following Anand *et al.* [45], a study that was based on Nussbaum's capability items [46]. A pilot test was conducted on 30 randomly selected respondents from the sample. The sample size for the pilot test was appropriate as recommended by Cooper and Schindler [47], with a range between 25 and 100 respondents. Amongst others, the test was intended to identify confusing instructions, omissions, or unexpected answers to multiple-choice questions. The results from the pilot test demonstrated that the questionnaire was appropriate and needed no changes. The questionnaires were then distributed to the actual respondents.

##### 4.3. Variables of the Study

###### 4.3.1 Dependent Variable

Following Prawitz *et al.* [42], the dependent variable, FWB, was measured on a scale that contained 8 items. The items, which asked the respondent's opinion of FWB on a ten-point Likert scale, were arranged in a continuum (from negative to positive feeling). The replies were then converted into a five-point scale for data analysis so that they would be more consistent with the measurement of other variables. Lower results revealed lower FWB, while higher scores revealed

higher FWB.

###### 4.3.2 Independent Variable

The independent variable is FL and as mentioned earlier was classified into financial attitude, financial behavior, and financial knowledge. The respondents were asked to rate their agreement with each of the twenty statements about financial attitude on a 5-point Likert scale, with 1 (completely disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), and 5 (completely agree). A higher score suggested a positive financial attitude, meaning that the respondent was more financially literate. On a Likert scale from 1 to 5, the respondents were asked to rate how accurately each of the twenty statements on financial behavior, described them or their situation. The options on the scale were 1 (never), 2 (seldom), 3 (sometimes), 4 (usually), and 5 (always). A higher score indicated more prudent financial behavior, signifying that the responder had a greater financial literacy. Lastly, the respondents were to respond to 13 questions about financial knowledge. A dichotomous scale of 0 (incorrect) and 1 (correct) was used to rate the response. The higher the score, the more financial knowledge the respondents possessed, meaning the more financially literate the respondents were.

###### 4.3.3 Moderating Variable

Capability was the moderating variable of this study. In the context of this study, the capability items employed were bodily health, bodily integrity, senses imagination and thought, emotions, practical reason, affiliation, and control over the environment. Following Anand *et al.* [45] study, the items were scored by using a seven-point scale or a dichotomous scale, such as 0 for "no" and 1 for "yes". To maintain consistency with the assessment of other variables, the items measured on the scale were converted into a five-point scale for data analysis.

## 5. RESULTS

### 5.1 Response Rate

From the sample of 300 responses, 25 responses were dropped as the respondents were not within the age of 18 to 24 years old. Another screening was made to exclude those whose monthly household income was more than RM4,850. This resulted in another 21 responses being excluded. The final number of responses included in the analysis was 254, which is equivalent to 86%.

5.2 Demographic Profile Analysis of the demographic profile of the respondents revealed that the majority of the respondents were female 155 (61.0%), while only 99 (39.0%) males participated in this study. Out of 254 respondents, the majority of respondents (134, 52.9%) were between 23 and 24 years old, followed by 65 (25.6%) were between 21 and 22 years old and 55 (21.7%) were between 18 and 20 years old. Malay (295, or 92.2%) made up the majority of respondents in terms of race, followed by Chinese (77.3%), Indians (20.7%), and Others (7.2%). In terms of the home location, most of the respondents 116 (45.7%) were from the central region of Peninsular Malaysia while the least representative region in the respondents was from Sabah 3

(1.2%). The analysis discovered that the majority of the respondents 179 (70.5%) graduated from private universities. Whereas, 75 (29.5%) graduated from public universities. For the highest education level, the majority of respondents 182 (71.7%) indicated a bachelor's degree, followed by a diploma of 51 (20.1%), 11 (4.3%), and a certificate of 10 (3.9%). Meanwhile, 148 (58.3%) of the respondents indicated that their field of highest education was in business, 33 (13%) in engineering, 32 (12.6%) in information technology, 3 (1.2%) and 2 (0.8%) in literature and law, respectively, while 36 (14.2%) indicated others. Another profile item collected was the respondent's occupation. The majority of them 166 (65.4%) were not employed, 76 (29.9%) worked in private sector organisations, and 7 (2.8%) were self-employed. In this study, the household income of the respondents will be represented by their sole monthly income to capture the classification of the B40 or low-income group. The analysis showed that 205 (80.7%) of the respondents were in less than RM2,500 classification (B1 category), followed by 29 (11.4%) respondents in RM2,500 – RM3,169 classification (B2 category), 18 (7.1%) respondents in RM3,170 – RM3,969 classification (B3 category), and the remaining 2 (0.8%) respondents were in RM3,970 – RM4,850 classification (B4 category).

5.3 Financial Literacy, Capability, and Financial Well-being of Low-income Young Adults

SmartPLS 3 was used in this study to analyze data. This study developed seven models that analyzed separately the seven capability items as moderators. Model 1 employed bodily health as moderator, whereas Model 2 employed bodily integrity, Model 3 employed sense imagination and thought, Model 4 employed emotions, Model 5 employed practical reason, Model 6 employed affiliation, and Model 7 employed control over one's environment as moderators. The moderator was first added to the model by SmartPLS 3 protocols to assess its main effect. The bootstrapping before moderation results revealed that for all models, two FL components (financial attitude and financial knowledge) had either significant positive or negative effects on the FWB of the low-income young adults, whereas the other FL component, financial behavior had no significant effect on the FWB of the low-income young adults in all models. Except for Model 5 and Model 7, the FWB of the low-income young adults was found to be significantly positively impacted by the capability factor.

The results of bootstrapping that was performed on each of the capability items as moderator demonstrated that the R-squared ( $R^2$ ) value for Model 4 showed the highest changes in  $R^2$  value as compared to the other six models. Consequently, this study presented and discussed data analysis on the main and moderating effects based on the results of Model 4.

Reflective measurement was employed on the constructs of this study. Table 1 presents a summary of the reflective measurement model evaluation, and Figure 1 shows the structural model. Composite reliability (CR) was used to measure the model's internal consistency, while indicator

loading, and average variance extracted (AVE) were utilized to measure indicator reliability and convergent validity, respectively. Table 1 shows several items under the financial attitude, financial behavior, financial knowledge, and capability (i.e., emotions), whereby several items were removed because the outer loadings were very low. Two items were subsequently retained for financial attitude, five for financial behavior, three for financial knowledge, and three for capability. Four items with outer loading value of at least 0.515 were item FWB6 and item FWB5 for the construct FWB (loading values of 0.515 and 0.518, respectively), item FLA14 for financial attitude (loading value of 0.555) and item FLK5 for financial knowledge (loading value of 0.592). These items were retained as they contributed to an AVE score of greater than 0.5 [48]. For internal consistency, CR for all constructs was at least 0.747, signifying a satisfactory internal consistency level. The AVE scores for all constructs were above 0.5, denoting an adequate convergent validity (Hair et al., 2017)[49].

Table 1: Summary of Measurement Model Results

Constructs	Items	Item reliability Loading	Composite reliability consistency	Convergent validity AVE	Discriminant validity		
					Cross loading	Fornell Larcker	HTMT
FWB	FWB6	0.515	0.894	0.522	Refer to Table 2	Refer to Table 3	Yes
	FWB5	0.518					
	FWB7	0.602					
	FWB4	0.760					
	FWB1	0.796					
	FWB8	0.822					
	FWB2	0.825					
	FWB3	0.846					
Financial Attitude	FLA14	0.555	0.747	0.612			Yes
	FLA13	0.957					
Financial Behaviour	FLB6	0.647	0.834	0.503			Yes
	FLB11	0.686					
	FLB5	0.686					
	FLB9	0.695					
	FLB13	0.820					
Financial Knowledge	FLK5	0.592	0.761	0.520			Yes
	FLK10	0.704					
	FLK11	0.846					
Capability (Emotions)	CE2	0.668	0.753	0.505			Yes
	CE1	0.688					
	CE3	0.772					

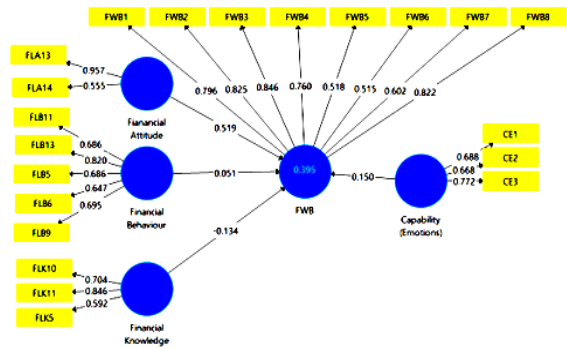
Following this, cross loading, Fornell-Larcker Criterion and Heterotrait-Monotrait (HTMT) were used to measure the model discriminant validity. As illustrated by Table 2 all items loadings on the associated constructs were greater than all of their loadings on other constructs. Therefore, it can be inferred that the indicators of different constructs were not inter-changeable, thus a good discriminant validity [50]. In addition, Fornell-Larcker Criterion results shown in Table 3 demonstrated that each construct of the model adequately

explained the variance on its own items as compared to the variance of other constructs. Lastly, as displayed in Table 4, the HTMT results did not include the value of 1 suggesting discriminant validity was established.

capability (Cohen, 1988)[51]. This R<sup>2</sup> value was above 0.33, which is considered as a moderate level of predictive accuracy (Cohen, 1988)[51].

**Table 2: Cross Loading Result**

	Capability (Emotions)	Financial Attitude	Financial Behaviour	Financial Knowledge	FWB
CE1	<b>0.6876</b>	0.1864	0.1562	-0.0722	0.2124
CE2	<b>0.6682</b>	0.1542	0.2246	0.0782	0.1865
CE3	<b>0.7719</b>	0.1472	-0.0129	-0.0213	0.1951
FLA13	0.2229	<b>0.9571</b>	0.2928	-0.2060	0.6128
FLA14	0.1213	<b>0.5552</b>	0.5125	0.0226	0.2134
FLB11	0.1120	0.3117	<b>0.6858</b>	0.0969	0.1374
FLB13	0.1049	0.2811	<b>0.8196</b>	0.1497	0.2751
FLB5	0.2241	0.2654	<b>0.6862</b>	-0.0122	0.1094
FLB6	0.1267	0.2376	<b>0.6470</b>	-0.0246	0.1167
FLB9	0.1087	0.3532	<b>0.6949</b>	0.0879	0.2291
FLK10	-0.0093	-0.1408	0.0958	<b>0.7035</b>	0.1160
FLK11	-0.0188	-0.1261	0.1216	<b>0.8459</b>	0.2022
FLK5	0.0073	-0.1142	0.0123	<b>0.5917</b>	0.1378
FWB1	0.1740	0.4385	0.1624	-0.2431	<b>0.7957</b>
FWB2	0.2081	0.6000	0.2116	-0.2436	<b>0.8255</b>
FWB3	0.1758	0.5744	0.2253	-0.2359	<b>0.8456</b>
FWB4	0.2415	0.4106	0.1686	-0.0983	<b>0.7598</b>
FWB5	0.1406	0.3099	0.4272	0.0242	<b>0.5181</b>
FWB6	0.2463	0.2072	0.0565	-0.0238	<b>0.5150</b>
FWB7	0.2914	0.2886	0.1770	-0.1126	<b>0.6021</b>
FWB8	0.2188	0.4445	0.1864	-0.1837	<b>0.8215</b>



**Figure 1: Structural Model Before Moderation Effect of Capability**

Next, Figure 2 shows the structural model by using bootstrapping on the moderation effect of capability on the relationship between financial attitude, financial behaviour, financial knowledge, and FWB of the low-income group young adults. The results revealed an increase in R<sup>2</sup> value by 10.9% with an improved R<sup>2</sup> value of 0.438. Thus, this study concluded that although the FWB was moderately explained by financial attitude, financial behaviour, and financial knowledge (Cohen, 1988)[51], changes in the R<sup>2</sup> value suggested capability may have a moderating effect on the relationship between potential role exhibited by the moderator, capability, on the relationship between financial attitude, financial behaviour, financial knowledge, and FWB.

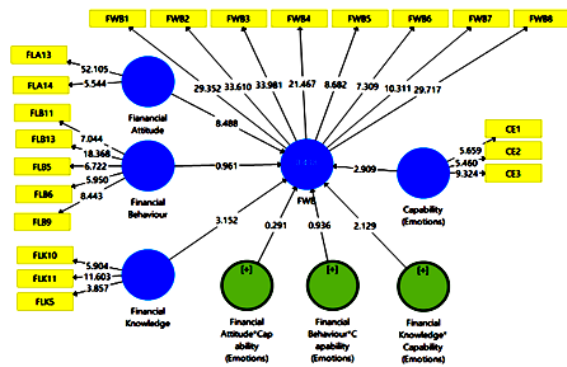
**Table 3: Fornell-Larcker Criterion Results**

	Capability (Emotions)	FWB	Financial Attitude	Financial Behaviour	Financial Knowledge
Capability (Emotions)	0.7107				
FWB	0.2800	0.7227			
Financial Attitude	0.2304	0.5973	0.7824		
Financial Behaviour	0.1723	0.2743	0.4097	0.7091	
Financial Knowledge	-0.0116	-0.2194	-0.1722	0.1119	0.7213

**Table 4: Heterotrait-Monotrait (HTMT) Results**

	Capability (Emotions)	FWB	Financial Attitude	Financial Behaviour	Financial Knowledge
Capability (Emotions)					
FWB	0.4445				
Financial Attitude	0.4450	0.7949			
Financial Behaviour	0.3296	0.3110	0.8527		
Financial Knowledge	0.2203	0.2975	0.2973	0.1667	

Figure 1 illustrates the structural model by using bootstrapping before the moderation effect of capability on the relationship between financial attitude, financial behaviour, financial knowledge, and FWB constructs for the low-income group young adults. The structural model showed an R<sup>2</sup> value of 0.395, indicating that FWB was moderately explained by the independent variables, financial attitude, financial behaviour, financial knowledge, and



**Figure 2: Structural Model After Moderation Effect of Capability**

The effect size, represented by f squared (f<sup>2</sup>) value was 0.01 for the predictive value of financial attitude, financial behaviour, and financial knowledge on FWB of the low-income young adults. This meant that all the independent variables had a small effect in producing R<sup>2</sup> values for FWB. Notwithstanding the above discussion, Table 5, however, demonstrates that only H1 was supported, denoting a significant positive effect of financial attitude on FWB of the low-income group young adults at p = 0.000. In the meantime, although H3 was not supported, however the result revealed that financial knowledge had a significant negative effect on FWB of the low-income group young adults at p =

0.002 ( $\beta = -0.150$ ). In addition, while H6 was not supported, the result showed that capability had a significant negative effect on the relationship between financial knowledge and FWB of the low-income group young adults at  $p = 0.034$  ( $\beta = -0.111$ ).

**Table 5: Summary of Results**

Hypothesis	Path coefficient, B	t values	P Values	Decision
H1 Financial Attitude -> FWB	0.482	8.488	<b>0.000*</b>	Supported
H2 Financial Behaviour -> FWB	0.050	0.961	0.337	Not Supported
H3 Financial Knowledge -> FWB	-0.150	3.152	<b>0.002*</b>	Not Supported
H4 Financial Attitude*Capability (Emotions) -> FWB	0.023	0.291	0.771	Not supported
H5 Financial Behaviour*Capability (Emotions) -> FWB	-0.148	0.936	0.350	Not supported
H6 Financial Knowledge*Capability (Emotions) -> FWB	-0.111	2.129	<b>0.034*</b>	Not Supported

**6. DISCUSSION**

The findings of the study discovered that only H1 was accepted, signifying the more positive financial attitude possessed by the low-income young adults, the greater their FWB. Meaning that the more prudent financial attitude (denoting a high level of FL) displayed by the low-income group young adults, the higher their FWB level. The findings corroborated Gutter and Copur [15], who revealed that financial attitude significantly positively correlated to FWB of the low-income group of young adults. Therefore, improving the FL of the low-income group of young adults is crucial to ensuring their FWB [11].

Even though H3 and H6 were not supported, it was notable to point out that the results were significant, but in different directions. For H3, the findings indicated that low-income group young adults' FWB decreased in proportion to their level of financial knowledge. Indicating that the more financial knowledge possessed by the low-income group of young adults, which would enable them to manage their finances efficiently for future planning, however, caused a decline in their FWB level. In other words, low-income group young adults' FWB decreased as their FL level increased. This finding supported a study by Utkarsh *et al.* [7] who found FL did not enhance FWB. One potential justification was that young adults in the low-income group may have shown a personal propensity for financial affairs or a high level of comprehension of financial thoughts. These, however, did not demonstrate that they had the financial endurance to continue meeting all of their present obligations and needs comfortably, and have the financial stability to continue doing so in the future. The COVID-19 pandemic impact could be another factor in this circumstance. Meanwhile, results of the H6 revealed that capability moderates the relationship between FL, in terms of financial behavior, and FWB of the low-income group young adults, in an opposite direction. The finding did not corroborate the capability view. The capability weakened the relationship between the FL (in terms of financial knowledge) and FWB of the low-income group of young adults. For instance, although the low-income group of young adults had opportunities to access financial-related matters, this, however, did not positively influence their FL to enhance

their FWB. The COVID-19 pandemic, according to this study, could have an impact on this outcome. Young adults or their household members have experienced job-related disruptions since the start of the COVID-19 pandemic in the form of a job loss, the use of a job retention scheme, a reduction in working hours, and/or a pay cut [52]. Although the low-income group of young adults had the capability and were financially literate, this did not contribute to a better FWB. Young people from lower social classes have been more heavily affected by the COVID-19 pandemic where they reported outright job losses [52].

Finally, the findings demonstrated that H2, H4, and H5 were not supported. For H2, the findings demonstrated that although the low-income group of young adults exhibited prudent financial behavior (which reflected a high FL level), this, however, did not enhance their FWB. This finding did not substantiate previous studies, such as Sabri *et al.* [6] and Sangeeta *et al.* [28], who found that financial behavior influenced the young population or young adults' FWB. On the other hand, the findings were consistent with Utkarsh *et al.* [7] who discovered that FL was not a major factor in improving the FWB of young adults.

For H4 and H5, the findings revealed that capability did not moderate the relationship between FL, in terms of financial attitude and financial knowledge, and FWB of the low-income group young adults. In this context, the findings did not corroborate the capability view, meaning that even though the low-income group of young adults was capable of being financially literate, for instance, they had the opportunities to access financial-related matters, but this did not positively influence their FL, in terms of financial attitude and financial knowledge, to enhance their FWB. This study concluded that the outcome might be influenced by the COVID-19 pandemic.

In addition to the aforementioned discussions, this study sought to emphasize the finding that showed a significant positive effect of capability on the FWB of low-income group young adults ( $p = 0.004$ ). Furthermore, out of the seven models run by this study, five models (except Model 5 and Model 7) presented a significant positive effect of capability on the FWB of low-income group young adults. This finding revealed a direct relationship between capability and FWB. It signified that the more the low-income group of young adults believed they could achieve in life, the stronger their FWB. Possibly some social and environmental factors have shaped the low-income group of young adults' capability that helped them to discover other strategies to obtain a sufficient level of FWB rather than just increasing FL [37].

**7. CONCLUSION**

Although there may be other factors that affect low-income group young adults' FWB, this study focused only on their level of FL and individual capability. In general, this study concluded that the FL of low-income group young adults, in terms of financial attitude, played a significant role in influencing their FWB. Individual capability, on the other hand, has an adverse moderating effect on the relationship between FL and FWB of low-income group young adults. Nevertheless, the additional analysis confirmed that individual capability could have a more significant role than



just as moderator as it was found to have a significant positive direct effect on the FWB of the low-income group of young adults.

The practical implications of this study included the need to impart financial-related knowledge such as financial management to educate young adults, especially those from low-income groups so that their FL can be enhanced and consequently can help them improve their FWB. This can be done through seminars or counseling sessions in managing finances by appropriate agencies. Furthermore, relevant agencies may develop more support services and activities that can strengthen the capabilities of low-income group young adults in dealing with financial-related matters, especially in this challenging time due to the impact of the COVID-19 pandemic. This study presented theoretical implications, whereby FL constructs (OECD) [43]; Potrich *et al.*, [44] and capability constructs, Anand *et al.*, [45] and Nussbaum, [46] were empirically evaluated in the context of low-income group young adults. Additionally, the findings revealed that the capability approach, although showed an adverse effect to some extent, explains the relationship between FL and FWB among low-income group young adults.

In conclusion, this study, which integrated FL and FWB within the framework of capability view, is somewhat limited, especially about young adults from low-income groups in the Malaysian context. To better understand the FWB of young adults from the low-income category, this study is crucial. The small sample size used was a limitation of the study. However, because it exceeded the minimal sample size recommended by the G\*Power software, the sample size taken was more than adequate. To gain an in-depth understanding of the issue of FWB among young adults in the low-income group, future studies can be carried out using a qualitative approach, such as an interview.

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#### ENDNOTE

<sup>1</sup>These questions comprise the InCharge Financial Distress/FWB (IFDFW) Scale, which is copyrighted by Prawitz et al. (2006). This scale may be duplicated only with written permission from the authors.

#### REFERENCES

- [1] Joo, S. (2008). Personal financial wellness. In Sabri, M. F., & Zakaria, N. F. (2015)[18]. The Influence of Financial Literacy, Money Attitude, Financial Strain and Financial Capability on Young Employees' Financial Well-being. *Pertanika Journal of Social Sciences & Humanities*, 23(4), 827-849.
- [2] O'Neill, B., Sorhaindo, B., Xiao, J. J., & Garman, E. T. (2005). Financially distressed consumers: Their financial practices, financial well-being, and health. *Journal of Financial Counseling and Planning*, 16(1), 73-87.
- [3] Joo, S. H., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic*, 25(1), 25-50.
- [4] Yunus, F. (2007). Youth employment and employability in Malaysia. *Malaysian Youth Report*.
- [5] Financial Education Network (FEN). (2019). Malaysia National Strategy for Financial Literacy 2019-2023.
- [6] Sabri, M. F., Anthony, M., Wijekoon, R., Suhaimi, S. S. A., Abdul Rahim, H., Magli, A. S., & Isa, M. P. M. (2021). The Influence of Financial Knowledge, Financial Socialization, Financial Behaviour, and Financial Strain on Young Adults' Financial Well-Being. *International Journal of Academic Research in Business and Social Sciences*, 11(12), 566-586.
- [7] Utkarsh, Pandey, A., Ashta, A., Spiegelman, E., & Sutan, A. (2020). Catch them young: Impact of financial socialization, financial literacy and attitude towards money on financial well-being of young adults. *International Journal of Consumer Studies*, 44(6), 531-541.
- [8] Agensi Kaunseling dan Pengurusan Kredit (AKPA). (2018). Financial behaviour and state of financial well-being of Malaysian working adults.
- [9] Bank Negara Malaysia. (2018). Financial Capability and Inclusion Demand Side Survey 2018.
- [10] Sabri, M.F., Cook, C. C., & Gudmunson, C. G. (2012). Financial well-being of Malaysian college students. *Asian Education and Development Studies*, 1(2), 153-170.
- [11] Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*, 7(1), 1-18.
- [12] Saigaran, N. G. (2021). Kootu fund as saving scheme of B40 Malaysian Indian women: Insights behind the participation as players and organisers during movement control order. *GEOGRAFIA-Malaysian Journal of Society and Space*, 17(3), 182-193.
- [13] Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. DOI: 10.1037/0003-066X.55.5.469
- [14] Brügggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*, 79, 228-237. DOI 10.1016/j.jbusres.2017.03.013
- [15] 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. DOI: 10.1007/s10834-011-9255-2
- [16] Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, 30(6), 708-723.
- [17] Abdullah, N., Fazli, S. M., & Muhammad Arif, A. M. (2019). The Relationship between Attitude towards Money, Financial Literacy and Debt Management with Young Worker's Financial Well-being. *Pertanika Journal of Social Sciences & Humanities*, 27(1), 361-378
- [18] Sabri, M. F., & Zakaria, N. F. (2015). The Influence of Financial Literacy, Money Attitude, Financial Strain and Financial Capability on Young Employees' Financial Well-being. *Pertanika Journal of Social Sciences & Humanities*, 23(4), 827 – 848.
- [19] Iannello, P., Sorgente, A., Lanz, M., & Antonietti, A. (2021). Financial well-being and its relationship with subjective and psychological well-being among emerging adults: Testing the moderating effect of individual differences. *Journal of Happiness Studies*, 22(3), 1385-1411. DOI: 10.1007/s10902-020-00277-x
- [20] Mogaji, E., Badejo, F. A., Charles, S., & Millisits, J. (2021).



- Financial well-being of sportswomen. *International Journal of Sport Policy and Politics*, 13(2), 299-319. DOI: 10.1080/19406940.2021.1903530
- [21] Garg, N. and Singh, S. (2018), Financial Literacy Among Youth. *International Journal of Social Economics*, 45(1), 173-186.
- [22] Mändmaa, S. (2019). Financial literacy—what and why should we improve. *Eurasian Journal of Social Sciences*, 7(2), 12-28.
- [23] Yong, C.C., Yew, S.Y. & Wee, C.K. (2018). Financial knowledge, attitude and behaviour of young working adults in Malaysia, *Institutions and Economics*, 10(4), 21- 48.
- [24] Hashim, H. B., Chee, A. L. Y., Fern, Y. S., Chelvarayan, A., & Lajis, K. N. B. (2021). Financial Literacy: The Influencing Factors Among Youth. *International Journal of Creative Business and Management*, 1(2), 1-10.
- [25] Agnew, S., & Harrison, N. (2015). Financial literacy and student attitudes to debt: A cross national study examining the influence of gender on personal finance concepts. *Journal of Retailing and Consumer Services*, 25, 122-129.
- [26] Amran, N. A., Sawandi, N., Shaari, H., Saad, R. A., & Abu Bakar, A. S. (2018). Financial Literacy among Malaysian Households in Managing Income. *Indian Journal of Public Health Research & Development*, 9(11), 17-23.
- [27] Kamel, A. M., & Sahid, S. (2021). Financial Literacy and Financial Behaviour of University Students in Malaysia. *Turkish Online Journal of Qualitative Inquiry*, 12(9), 1208-1220.
- [28] Sangeeta, P. K., & Sangal, A. (2022). Determinants of Financial Literacy and its Influence on Financial Wellbeing — a Study of the Young Population in Haryana, India. *Финансы: теория и практика*, 26(5), 121-131.
- [29] Santos, D. B., Mendes-Da-Silva, W., Norvilitis, J. M., & Silva Flores, E. D. (2019). Credit card and financial well-being among females. In *Individual Behaviors and Technologies for Financial Innovations*, 97-116. Springer, Cham. DOI: 10.1007/978-3-319-91911-9\_5
- [30] She, L., Rasiyah, R., Waheed, H., & Sharif, S. P. (2021). Excessive use of social networking sites and financial well-being among young adults: the mediating role of online compulsive buying. *Young Consumers*, 22(2), 272-289. DOI 10.1108/YC-11-2020-1252.
- [31] Philippas, N., & Avdoulas, C. (2020). Children of Crisis: Financial Literacy and Financial Well-being among Generation-Z Business-School Students in Greece. *European Journal of Finance*, 26(4-5), 360-381.
- [32] Sen, A 1980, 'Equality of what?'. In Brown, J. T. (2020). Economic dignity and financial capabilities: connecting principles and concepts. Research Policy Center, Australia.
- [33] Sen A. K., 1985. *Commodities and Capabilities*, Amsterdam, North-Holland.
- [34] Bowman, D., Banks, M., Fela, G., Russell, R., & de Silva, A. (2017), "Understanding financial wellbeing in times of Insecurity", working paper, RMIT University, Australia, April.
- [35] Nussbaum, M., (2006). *Frontiers of Justice: Disability, Nationality, Species Membership*, Cambridge, MA: Harvard University Press. In Robeyns, I. (2016). The Capability Approach. *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.). Retrieved 30 October 2020 from <https://plato.stanford.edu/archives/win2016/entries/capability-approach/>.
- [36] Shibikom, A. S. (2017). Financial Capability, Money Management, and Developmental Resources for Young Children in Low-Income Families (Doctoral dissertation, University of Kansas).
- [37] Potocki, T. (2019). Financial capability among low-income households in rural parts of Poland. *Argum. Oeconomic*, 2, 85-114. DOI: 10.15611/aoe.2019.2.04
- [38] Bowman, D., & Wickramasinghe, S. (2020), "Trampolines not traps: enabling economic security for single mothers and their children", report, Brotherhood of St Laurence, Australia.
- [39] Brown, J. T., & Bowman, D. (2020), "Economic security and dignity: a financial wellbeing framework", report, Brotherhood of St Laurence, Australia.
- [40] Mathews, D. (2010). "Assessing Sleep Quality in Young Adult College Students, Aged 18 - 24 in Relation to Quality of Life and Anthropometrics" (2010). Electronic Theses and Dissertations. 1265. <http://digitalcommons.library.umaine.edu/etd/1265>
- [41] Department of Statistics Malaysia (DOSM) (2019). <https://www.dosm.gov.my/v1/index.php>. Retrieved date: 22 February 2023.
- [42] Prawitz, A.D., Garman, E.T., Sorhaindo, B., O'Neill, B., Kim, J. & Drentea, P. (2006). The InCharge financial distress/financial wellbeing scale: Development, administration, and score interpretation. *Financial Counseling and Planning*, 17(1): 34-50.
- [43] Organisation for Economic Co-operation and Development (OECD) (2018), OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion. <https://www.oecd.org/financial/education/2018-INFE-FinLit-Measurement-Toolkit.pdf>. Retrieved date: 16 January 2021.
- [44] Potrich, A. C. G., Vieira, K. M., & Kirch, G. (2015). Determinants of financial literacy: Analysis of the influence of socioeconomic and demographic variables. *Revista Contabilidade & Finanças*, 26, 362-377.
- [45] Anand, P., Hunter, G., Carter, I., Dowding, K., Guala, F., & Van Hees, M. (2007). The measurement of capabilities. Open University Discussion Paper (Milton Keynes: Open University).
- [46] Nussbaum, M.C. (2000), Women and Human Development: The Capabilities Approach. In Anand, P., Hunter, G., Carter, I., Dowding, K., Guala, F., & Van Hees, M. (2007). The measurement of capabilities. Open University Discussion Paper (Milton Keynes: Open University).
- [47] Cooper, D. R., & Schindler, P. S. (2006). *Business Research Methods* (9th edition). USA: McGraw-Hill.
- [48] Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Routledge.
- [49] Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. A. (2017). *Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd Edition, Sage Publications Inc., Thousand Oaks, CA.
- [50] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115-135.
- [51] Cohen, J. *Statistical power analysis for the behavioral sciences* (2nd Ed.). New York: Routledge, 1988.
- [52] Organisation for Economic Co-operation and Development (OECD) (2021), Young people's concerns during COVID-19: Results from Risks That Matter 2020.