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Resilience and Insights: Bumiputera Parental Investment in Education Amidst Challenges

Norshamliza Chamhuri[1*], Nur Syahirah Che Lah[1], Norain Mod Asri[1] and Azrina Abdullah Al-Hadi[2]

[1] Centre for Sustainable and Inclusive Development Studies, Faculty of Economics and Management, Universiti Kebangsaan Malaysia, 43600, Bangi, Selangor, Malaysia

[2] Centre for Global Business and Digital Economy Studies, Faculty of Economics and Management, Universiti Kebangsaan Malaysia, 43600, Bangi, Selangor, Malaysia

*norshamliza@ukm.edu.my

Abstract

Higher education plays a vital role in human capital development and a nation's economic growth. Nonetheless, parents' awareness of saving is still low. This paper explores the factors that influence Bumiputeras' financial investment in their children's education. A survey was conducted in the Klang Valley with 311 respondents. The findings show that Bumiputera parents' intention to save for their children's education is high, but financial constraints remain as the main challenge. An Exploratory Factor Analysis identified financial ability, source of knowledge and financial behaviour, financial stress, credit card usage, and financial responsibility as factors with a significant influence on Bumiputeras' financial wellbeing. These findings highlight a few policy implications to encourage parental investment. Financial education about the need to save for children's education raises parents' early awareness. In addition, an insurance system combined with education savings may stimulate parental investment. Education is crucial to enabling Bumiputera to escape poverty.

Keywords: B40; Bumiputera; children's' education; education; financial wellbeing; Malaysia; parental investment

Abstrak

Pendidikan tinggi memainkan peranan penting dalam pembangunan modal insan dan pertumbuhan ekonomi sesebuah negara. Walau bagaimanapun, tahap kesedaran ibu bapa terhadap amalan menabung masih rendah. Makalah ini meneroka faktor-faktor yang mempengaruhi pelaburan kewangan Bumiputera dalam pendidikan anak-anak mereka. Satu

tinjauan telah dijalankan di Lembah Klang yang melibatkan 311 responden. Dapatan kajian menunjukkan bahawa niat ibu bapa Bumiputera untuk menabung demi pendidikan anak-anak adalah tinggi, namun kekangan kewangan kekal sebagai cabaran utama.
Analisis Faktor Penerokaan (EFA) mengenal pasti keupayaan kewangan, sumber pengetahuan dan tingkah laku kewangan, tekanan kewangan, penggunaan kad kredit, serta tanggungjawab kewangan sebagai faktor-faktor yang mempunyai pengaruh signifikan terhadap kesejahteraan kewangan Bumiputera. Dapatan ini menyerlahkan beberapa implikasi dasar untuk menggalakkan pelaburan ibu bapa. Pendidikan kewangan mengenai keperluan menabung untuk pendidikan anak-anak berupaya meningkatkan kesedaran awal ibu bapa. Selain itu, sistem insurans yang digabungkan dengan simpanan pendidikan boleh merangsang pelaburan ibu bapa. Pendidikan adalah amat penting bagi membolehkan kaum Bumiputera keluar daripada belenggu kemiskinan.

Introduction

Higher education is a new norm in this modern age. Given its strong positive correlation with lifetime earnings, attaining a bachelor's degree has become a common life path for society (Zainal et al. 2009). Higher education in Malaysia remains an essential element in the nation's development. According to UNESCO (2020), Malaysians' enrolment rate in tertiary education has steadily increased from 3.82 percent in 1979 to 45.13 percent in 2018. Among the working-age population, 21.3% or 5.29 million Malaysians are graduates, indicating that tertiary education attainment is quite common (DOSM 2019). On average, Malaysian parents spend RM107,920 (USD 25,479) per child on their education from primary school to the undergraduate level; interestingly, this is more than double Malaysia's per capita income (HSBC 2017; World Bank 2019). However, the cost of higher education has risen each year, becoming a financial burden for many families. In the past decade, the average tuition fees for higher education have increased more than tenfold (Hamilton 2013). This trend raises financial concerns among parents and students about their ability to cover all expenses, especially among those from low-income households.

Research found that many parents are poorly informed about higher education costs and thus, often unprepared to undertake it (Kim et al. 2014; Hamzah et al. 2011; Yi 2018). Inadequate parental planning will hinder children from pursuing higher education or force them to settle down for poor-quality institutions (rather than fulfilling their academic potential) to avoid financial burden. Often, student loans are the only option for children who do not have savings to cover their tertiary education expenses. Nevertheless, this conventional financial route has led to another long-term social issue: graduating with debt. Lack of proper financial management, the high cost of living, and the risk of unemployment may keep the younger generation continuously trapped in debt and the cycle of poverty. In the long run, education may be seen as a burden instead of a way out of poverty. This might contradict the government's plan to improve society's welfare through education. Hence, this emphasizes the need for early parental investment. Despite various incentives to encourage early parental investment, such as the National Education Savings Scheme (SSPN), interest in saving remains low (Steelman & Powell, 1991; Yi, 2018). Some parents have even placed the responsibility for funding their children's higher education on the government, or even on their own children (Steelman and Powell 1991). Yet, there is still minimal literature on Malaysians' parental investment towards financing their children's higher education, particularly among the Bumiputera.

The indigenous people of Malaysia and the Malays are both labelled in this country as Bumiputera. Out of Malaysia's 29.7 million citizens, 69.6% are Bumiputera (DOSM 2020). Despite being the majority ethnic group holding political power, the Bumiputera also constitutes the poorest segment of society, with the lowest average income. Within the Bumiputera group itself, almost half (44.7%) are low-income households, or the bottom 40 percent (B40) (DOSM, 2020). The income gaps between racial groups are wide and have caused socioeconomic imbalance in 1969 (Khalid 2011).

Given that Bumiputera households receive substantial government aid, the researchers would like to determine whether saving for their children's higher education remains a priority. As previous parental investment literature was mainly conducted outside Malaysia, a native study may provide some perspectives for the formulation of government policies and the roles of industrial players in encouraging parental investment. This paper aims to gain an understanding of Bumiputera parents' financial investment in their children's education.

Literature Review

Bumiputera Education and Financial Assistance

In Malaysia, public higher education is mainly funded by the federal government through its annual budget allocation and lump-sum funding for development expenditure. Under the NEP, various quotas and scholarships are provided through agencies such as the Public Service Department (PSD) and Majlis Amanah Rakyat (MARA) to help finance Bumiputera higher education and encourage the target group to enter universities (Shaari 2011). In 2018, a total of RM2 billion out of RM3.8 billion in government spending on scholarships was allocated exclusively to Bumiputera students through MARA institutions (Zulkafeli 2018). In 2019, Malaysia provided its largest education budget yet, totalling RM60.2 billion, or 19.1 percent of the government's total spending (Ramasamy 2018). Nevertheless, the continuous increase in higher education tuition costs, coupled with the pandemic, has forced the Malaysian government to cut its education budget allocation for 2021 to RM50.4 billion, or 15.2 percent of total government spending (A. Hamzah 2020).

Introduced in 1997, the National Higher Education Fund (PTPTN) is a government initiative to finance Malaysians' tertiary education through loans. Once graduated and employed, borrowers are required to repay their student loans through monthly commitments. The interest rate on the loan is intentionally kept at 1% per annum to make education available to all Malaysians. Compared with other bank educational loans, the PTPTN is certainly considered a generous loan scheme (Yi 2018).

The National Education Savings Scheme (SSPN) was introduced in 2004 to encourage parents to save for their children's future education and reduce dependency on loans. These two prominent incentives are the most common pathways to financing tertiary education for low-income students.

Even though some universities, e.g., private universities, also offer scholarships for Malaysians, they are limited and highly competitive. Compared to public institutions, private tertiary education institutions are six to ten times more costly and cannot be afforded by students from low and average-earning households (Benjamin et al. 2011). It is worth noting that PTPTN has offered a total of RM 40 billion in student loans and RM13 billion in interest since its establishment (Wan Jan 2020). It is also concerning that 97% of defaulters come from the B40 group – this may indicate their inability to repay their student debts due to their own financial struggles. This social issue of graduates' debt may eventually degrade the quality of life of youths in the long run.

The Price for Tertiary Education in Malaysia

As in other countries, financing tertiary education has become a challenge in Malaysia. As shown in Table 1, the estimated course fees for a Bachelor of Engineering in a private university are considerably higher than those for a similar course taken at a public university. The constant rise in enrolment numbers in tertiary education, coupled with budgetary constraints and the rising costs of higher education, has become a challenge for Malaysians pursuing their education. Financial assistance for students at the tertiary level has been found insufficient, and the costs are too high for students from low-income households to bear (Benjamin et al. 2011). This trend stresses the need for early parental investment, as financial constraints would certainly hinder meaningful access to education.

Table 1. Estimated private and public university costs in Malaysia.

Provider	Qualification	Estimated course fees (RM)
Private university	Bachelor of Engineering (Hons)	RM 158,038
Public university	Bachelor of Engineering (Hons)	RM 9,520

Source: Taylor's University (2024); UKM (2024)

Limited financial aid quotas and highly competitive scholarships have forced some students to bury their dreams of pursuing higher education due to financial constraints. Some students had to work for a few years to save for university fees before they could afford to enroll. However, since they have been out of academia for too long, their interest in learning has faded. Some of them enrolled in university for a few years but dropped out when the financial burden became unbearable (Mustafa 2019).

Factors Influencing Parents' Investment Decisions on Education

In providing the family's basic needs, parents must decide how to allocate their resources among their children. Past literature found that parents' investment decisions for their children are influenced by various factors, including socioeconomic background (Eckel et al. 2013; Hotz et al. 2018), parents' aspirations (Hu & Yeung, 2019; Lee, 2008), and financial wellbeing (H. Hamzah et al. 2011; Hotz et al. 2018).

Socioeconomic background

Many studies have shown that parents' sociodemographic background does influence their investment in children's education (Lee 2008; Hamzah et al. 2011; Hotz et al. 2018; Hu & Yeung 2019). Parents' gender may determine their attitudes towards parental responsibility, with mothers more willing to make financial sacrifices than fathers, due to a unique, closer bond with their children. As women are more risk-averse than men (Loke 2017; Seguino and Floro 2003), they tend to save more for their children's education. Cultural norms also highlight the independent traits among males, leading fathers to overestimate their financial capabilities or to believe that children should cover their own college expenses (Steelman & Powell, 1991).

Higher socioeconomic status parents and those who are better educated tend to provide higher-quality education and more parental assistance than their less educated peers. Thus, the likelihood of their children graduating is also higher (Hotz et al. 2018; Hamilton 2013). Interestingly, the notion that more educated parents invest more in their children's education is more prevalent among mothers' education than fathers' (Hu & Yeung, 2019). Family structure also plays a role, with married parents (Turley and Desmond 2011) and families with fewer children (Lee 2008) more likely to invest in their children's education than single parents or those with many children.

Parents' aspirations

According to the status-attainment model (Sewell and Hauser, 1980), as cited in Kim et al. (2014), parents' aspirations and socioeconomic status play key roles in children's educational attainment. Parents from highly educated backgrounds are more willing to sponsor their children's education, as they may feel it is a duty to provide the same support they received. Similarly, if parents have high expectations for their children's academic success, they are more likely to be motivated to invest (Kim et al., 2014).

The child's gender may also alter parents' aspirations. Cultural norms that prioritise sons may change parents' decisions, leading them to invest more in sons than in daughters. The human capital perspective holds that sons will become future household heads who are more independent and have better job prospects, thereby providing higher returns to their parents (Steelman and Powell 1991). If expected returns are lower for females, parents might invest more in their sons. On the contrary, studies by Lee (2008) and Kim et al. (2014) found no gender bias in parents' investment, thus negating this theory. Parents' aspirations remain a strong predictor of their investment and, as such, need to be explored in the context of Malaysia, as no past research has yet studied this cultural norm.

Financial wellbeing

Financial wellbeing (FWB) is defined as a financial situation free of anxiety and characterized by health and happiness (Gerrans et al. 2013). Parents' financial wellbeing is an important predictor of investment in children's education, as it reflects the household's ability to afford it. FWB is determined by various factors, including financial behaviour (Yusof et al. 2015; Loke 2016; 2017), financial knowledge (Daud et al. 2019), and financial stress (Mahdzan et al., 2019). Financial behaviour is an individual's habit of managing finances, e.g., planning expenses, recording cash flows, and paying bills on time. It is known that positive financial behaviour, such as consistent savings and under-spending, leads to better FWB (Sabri et al. 2020; Yusof et al. 2015; Loke 2016). However, some Malaysian households were found to practice reckless financial behaviour, including inclinations to live beyond means (Loke 2016; 2017), low capability in managing long-term investments (Sabri et al., 2020), inadequate savings, and over-indebtedness (Daud et al. 2019; Yusof et al. 2015). These behaviours lead to lower levels of FWB and may eventually reduce parents' tendency to save for their children's college.

In addition, financial knowledge also plays a massive role in determining FWB (Daud et al. 2019; Loke 2016; Mahdzan et al. 2019). Individuals with high financial knowledge tend to be more confident in managing their finances and, as a result, are less vulnerable to economic shocks. Another element of FWB is financial stress–financial strain that occurs when one faces inadequacies to meet the essential needs to sustain a standard of living (Mahdzan et al. 2019). Economic pressures such as unemployment, divorce or death of spouse, and physical disability significantly impact a household's FWB, especially among low-income and seasonal-income earners (Loke 2016; Mahdzan et al. 2019). More than a fifth of urban Malaysian households lack sufficient savings and are unable to sustain their expenses for more than 3 months if their income is cut off (Yusof et al. 2015; Loke 2016; 2017). Thus, parents need prudent financial management skills, as this may contribute to their investment in their children's education.

Based on the literature review, a theoretical framework has been developed (Figure 1). The authors posit that sociodemographic factors, parents' aspirations, and parents' financial wellbeing are the main factors that influence parents' investment in their children's education.

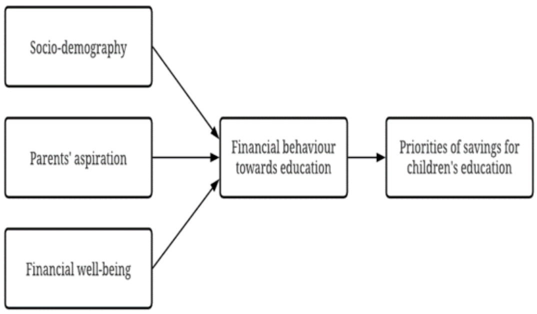

Figure 1. Theoretical framework

Source: adapted from H. Hamzah et al., (2011); Kim et al., (2014)

Methods

A total of 311 respondents participated in this study. The survey was conducted online using the Google Form platform. The primary inclusion criteria for this study's participants were: aged 19 years or older; married or a single parent; categorised as Bumiputera; and living in the Klang Valley, an urban region in Malaysia.

The questionnaire was developed based on the literature, including Agensi Kaunseling dan Pengurusan Kredit (AKPK) (2018); Gerrans et al. (2013); Houts & Knoll (2020); and Mahdzan et al. The questionnaire's link was set to allow one-time access per email to avoid duplication. The first section of the questionnaire consists of demographic questions on age, gender, location, educational background, and marital status. Sections Two through Four consist of a series of statements used by respondents to describe their behavioural pattern or agreeability using a four-point Likert scale ranging from 1 = Most Disagree, 2 = Disagree, 3 = Agree, to 4 = Most Agree. A four-point Likert scale was used because it has high internal reliability (Croasmun and Ostrom 2011) and helps avoid central tendency bias.

Descriptive analysis and Exploratory Factor Analysis (EFA) were performed using a principal component analysis and varimax rotation. For EFA, the minimum factor loading criterion was set to 0.50. The communality of the scale, which indicates the amount of variance in each dimension, was also assessed to ensure acceptable levels of explanation.

EFA was conducted using SPSS version 26. The reliability of the scale and the item correlations were tested using Cronbach's Alpha, which yields a high value indicating high reliability. A principal component analysis was conducted to determine the underlying factors, and the Varimax rotation was used as the orthogonal technique, which maximizes the variance loadings on the axes. The maximum likelihood factor analysis with a cut-off point of 0.40 and the Kaiser's criterion of eigenvalues of greater than 1 were included in the model (Yong and Pearce 2013).

Results and Discussion

The sample comprised 311 *Bumiputera* living in the Klang Valley (Table 2). A majority of respondents in this study were females (n=252, 81%), aged 25 to 44 years old (n=256, 82.3%), and had attained secondary education (n=131, 42%). Most respondents were unemployed or housewives (n=114, 37%), had household monthly incomes below RM 3859 (n=217, 70%), and were married (n=294, 95%). In short, a majority of the sample are female respondents who are mothers in B40 households. Nevertheless, the literature indicates that women are more sensitive to household expenditures and children's wellbeing than fathers (Yusof 2015; Seguino and Floro 2003). Therefore, their responses are still valuable for this research.

Table 2. Respondents' sociodemographics

	Demographic variable	Frequency	Percentage
Gender	Male	59	19.0
	Female	252	81.0
Age	19-24 years old	9	2.9
	25-34 years old	129	41.5
	35-44 years old	127	40.8
	45-54 years old	37	11.9
	55-64 years old	5	1.6
	65 years old and above	4	1.3
Education level	Primary school	4	1.3
	Secondary school/SPM	131	42.1
	STPM / Matriculation / Foundation / Diploma	82	26.4
	Bachelor's degree	75	24.1

	Master's degree	15	4.8
	PhD	3	1.0
	Professional level	1	.3
Main occupation	Student	2	.6
	Government sector	58	18.6
	Private sector	85	27.3
	Part-time workers	10	3.2
	Self-employed	38	12.2
	Unemployed	114	36.7
	Retiree	3	1.0
	Statutory body	1	.3
Household monthly income	Below RM 3859 (B40)	217	69.8
	RM 3860 - RM 8319 (M40)	72	23.2
	RM 8320 and above (T20)	22	7.1
Marital status	Married	294	94.5
	Single parent	17	5.5
	Total	**311**	**100.0**

Table 3 shows households' spending patterns by monthly priority.

Table 3. Households' spending patterns

	Spending category	**Ranking**					**N**	**%**
		1	**2**	**3**	**4**	**5**		
1	Groceries	91	36	59	57	30	273	88.3
2	Utilities (Electricity, water, Wi-Fi, phone bill)	22	56	61	46	37	222	71.8
3	Accommodation (loan/rental)	112	25	10	9	10	166	53.7
4	School expenses (fees, extra classes, sports)	25	38	27	36	18	144	46.6
5	Vehicle loan	15	63	29	17	8	132	42.7
6	Children necessities (childcare, milk, diapers)	19	28	26	21	23	117	37.9
7	Transportation (petrol, toll, bus, motor)	3	6	17	29	16	71	23.0
8	Daily expenses	3	3	6	8	22	42	13.6
9	Private expenses (shopping, vacation)	0	4	7	11	24	46	14.9
10	Loan repayment (personal/student loan)	6	6	10	7	5	34	11.0

11	Insurance / Takaful / Hibah	1	4	7	3	5	20	6.5
12	Savings	1	1	0	2	4	8	2.6
13	Allocation for parents/spouse	2	1	2	5	2	12	3.9
14	Hospital bills, medicine	0	0	0	2	3	5	1.6
	Error	9						
	No. of respondents	309						

Groceries (88%) were the top priority among respondents' top five monthly expenses. The second priority was utility bills (72%), followed by accommodation (54%), which were the households' necessary expenses. Expenses for children, such as school expenses (47%) and children's necessities (38%), ranked fourth and sixth, respectively. However, these expenses were more for immediate needs than for long-term investment. These spending patterns suggest that these households' expenses were more oriented towards fulfilling necessities than towards investment. This is understandable, as more than half of the sample consisted of B40 individuals. Studies by AKPK (2018) also showed that low-income households spend more on essentials and short-term-oriented items than on long-term-oriented items. Savings ranked 12th, with only 2.6% of respondents listing it as one of their top five monthly priorities. The respondents' inability to save may be due to limited financial resources and a high cost of living, which, in turn, leads to a smaller income surplus for savings.

From the 44 statements, an exploratory factor analysis (EFA) was conducted to identify the most prominent factors influencing respondents' financial wellbeing. The analysis helped the authors reduce the constructs to 22 statements under 5 factors. Using the principal component analysis and varimax rotation, EFA revealed five factors that collectively explained 60.7% of the variance (Table 4).

Table 4. EFA Bumiputera Financial Wellbeing

Item	**Rotated Component Matrix**				
	1	**2**	**3**	**4**	**5**
1. I am confident that I can sustain the same standards of living after retirement.	0.793				

2. My finances are stable enough to afford a more comfortable living after retirement.	0.784		
3. If an emergency/financial shock occurs, I can manage my expenses & commitments for three months using my emergency savings.	0.779		
4. I am confident of my financial ability to achieve my short-term goals (furniture, vacation, etc.)	0.736		
5. I have extra money at the end of the month.	0.721		
6. My finances are sufficient for me and my dependents in terms of daily expenses.	0.706		
7. I save consistently every month.	0.701		
8. I am confident with my personal money management.	0.645		
9. I am able to prepare RM 1000 in emergency cases.	0.609		
10. I am able to pay all expenses and commitments every month.	0.594		
11. I ask for financial advice from my partner/parent/family member.		0.723	
12. I prefer to gain financial knowledge from reading/internet.		0.713	
13. I am disciplined in settling my debts.		0.652	
14. I always keep track of my household's expenses every month.		0.602	
15. I often face difficulties to settle my utility bills (electric, water, phone, internet).			0.804

16. I have no emergency savings.			0.728		
17. I do not easily lend money to others.			0.663		
18. I often overspend my monthly budget.			0.543		
19. I only have to pay the minimum of credit card amount every month.				0.787	
20. I often use a credit card to shop.				0.781	
21. I only save if I have extra money.					0.758
22. I am fully responsible for my financial situation.					0.651
Eigenvalue	6.264	2.922	1.836	1.221	1.107
Percent variance	24.65	11.46	9.70	8.25	6.64
Cumulative variance	24.645	36.099	45.801	54.051	60.688
Cronbach's alpha	0.907	0.715	0.677	0.692	0.473
Factors mean	2.30	2.78	2.33	1.76	2.77

Factor One with an Eigenvalue of 6.26, comprised of 10 items. This factor was labelled "financial ability" because these items collectively explain respondents' confidence in their financial capability to reach any goal or respond to emergency shocks. The ability to commit to consistent monthly savings and to prepare an RM1000 emergency fund provided a glimpse of the Bumiputera households' financial situation. This is an essential factor to assess, as low levels of financial capability are negatively associated with poor financial planning and savings (Sabri et al. 2020); thus, it will also reveal the group's priority for saving for their children's education. With a Cronbach's alpha of 0.907, this construct was considered very reliable. A mean score of 2.30 ranked this factor fourth in measuring parents' financial wellbeing.

Factor Two, with an Eigenvalue of 2.92 and a Cronbach's alpha of 0.715, had four items categorised as "source of knowledge and financial behaviour". Items 11 and 12 described the source of financial knowledge, showing the most preferred medium for households to seek financial expertise or advice. On the other hand, items 13 and 14 describe the respondents' financial behaviour in settling debts and managing household expenses. With a factor mean of 2.78, this is the most essential factor in determining financial wellbeing among Bumiputera parents. Several past studies also highlighted financial knowledge as a necessary element of financial behaviour (Loke 2016; Yusof et al. 2015; Mahdzan et al. 2019). A lack of financial literacy has been found to be a strong reason households lack plans for emergency expenses or savings (Gathergood and Wylie 2018). Parents must have adequate financial knowledge. Individuals with a high level of financial knowledge can understand and evaluate financial options; therefore, they tend to have better future plans and respond appropriately to their financial situation. Family members, friends, and the internet are common sources respondents use to gain financial knowledge (Yi 2018). Hence, the agents of financial expertise play a crucial role in shaping society's financial behaviour. This differs from the conventional approach to building financial literacy, which involves attending money management classes or seminars. Therefore, the government should rethink an innovative solution to encourage and increase awareness of parental savings.

Factor Three, which had an Eigenvalue of 1.84 and a Cronbach's alpha of 0.68, comprised four items under the umbrella term "financial stress". The four items covered respondents' ability to pay utility bills, ownership of emergency funds, ability to lend, and overspending habits. Financial stress signals a household's ability to withstand economic shocks, such as sudden unemployment or medical expenses. Parents under high financial stress are less likely to have good financial wellbeing and thus are less likely to invest in their children's education. With a mean of 2.33, this factor ranked third among indicators.

Factor Four, with an Eigenvalue of 1.22, included two items related to "credit card usage". This factor shows the respondents' understanding of credit card management and expenses. The results imply that the respondents have limited knowledge and commitment to credit card use. This is justified because low-income households are less likely to use credit cards (AKPK 2018). This factor had the lowest mean of 1.76 and a Cronbach's alpha of 0.69; thus, it is considered the least important construct for Bumiputera households' financial wellbeing.

Factor Five, with an Eigenvalue of 1.11 and a Cronbach's alpha score of only 0.47, also consisted of two items: savings after expenses and responsibility towards financial situation. This concept was labelled "financial responsibility" and reflects individuals' sense of responsibility for managing their own finances. The factor mean was 2.77, making this factor the second most crucial construct for the Bumiputera's financial wellbeing.

Table 5. Reliability statistics

Factors reloaded	Mean	SD	Cronbach's alpha
Source of knowledge and financial behaviour	2.78	0.75	0.715
Financial responsibility	2.77	0.79	0.473
Financial stress	2.33	0.84	0.677
Financial ability	2.30	0.80	0.907
Credit card usage	1.76	0.82	0.692

Table 5 summarizes the reliability scores for the financial wellbeing factors. These factors, reloaded, are reliable constructs that can be used to measure financial wellbeing. All factors have good reliability (>0.50) except for factor 5. However, since the reliability of Factor 5, "financial responsibility," is close to 0.5, the item is retained.

Conclusion

The spending pattern among the Bumiputera is more inclined towards immediate needs rather than long-term investment. This finding suggests that a majority of Bumiputera households, especially those in the B40 group, may not consider investing in their children's education as a top priority due to limited incomes.

In addition, the exploratory factor analysis identified financial ability, source of knowledge, financial behaviour, financial stress, credit card usage, and financial responsibility as factors that could significantly influence Bumiputera financial wellbeing and investment decisions. Awareness of Bumiputera financial aid, dependency on government support, and parents' financial preparations are the three most reliable factors influencing Bumiputera's willingness to pay for their children's education.

Parents' early preparation for their children's education could be more substantial to reduce the burden of student loan debt from financial institutions. Efforts from both the government and households are crucial for the long term; however, policies are needed to support low-income households, as they may still be unable to cover the costs. In efforts to encourage parental investment, this research recommends that relevant government or non-government agencies provide more financial education on savings and university fees to raise parents' awareness of the importance of early investment in their children's education. As parents increasingly seek financial information online, a one-stop information centre on university fees, savings plans, and financial assistance may be useful. An affordable insurance scheme bundled with education savings may also be one of the solutions to encourage parental investment, as many low-income households are poorly insured (Gathergood and Wylie 2018). This is important because savings with insurance protection cushion households from financial shocks and, at the same time, safeguard their children's future.

Despite its exploratory nature, this study also offers some insight into the financial situation of Bumiputera households. The plan to reduce the government's fiscal burden and reduce the Bumiputera's dependency on government aid might still have a long way to go, as it requires careful consideration given the continuous rise in higher education costs that low-income Bumiputera households cannot afford (Khalid 2011; UNICEF & UNFPA 2020). Moreover, the COVID-19 crisis has shifted many households' priorities toward survival rather than long-term investment. Faced with unemployment and economic uncertainties, low-income households are certainly having a hard time surviving, and all their savings might already be used up. Hence, cutting financial aid for *Bumiputera* is not the best option for the time being, as it may eliminate their children's chances of pursuing tertiary education and worsen their families' socioeconomic position in the long run. This action may further deepen the economic disparity in the future.

To reduce the fiscal burden of financing education, the government should first ensure that the current financial aid only serves the appropriate focus group, B40 households. A thorough and fair selection should be made not only on the basis of students' performance but also on their backgrounds. Poor students may not achieve outstanding results due to an unsupportive environment and an inability to afford educational assistance, such as tuition, internet access, or revision books. Therefore, selection for scholarship awards should not be based solely on examination performance or an online application. Frequent on-field observations by relevant institutions are crucial to ensure that only the appropriate group receives financial aid, rather than random applicants, including those from wealthy families.

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