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## From Anxiety to Action: Understanding Financial Worries and Strategies to Boost Insurance Take-Up

Hui Shan Lee<sup>1,\*</sup>, Kee Seng Kuang<sup>2</sup>

<sup>1</sup>Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Selangor, Malaysia

<sup>2</sup>Lee Kong Chian Faculty of Engineering and Science, Universiti Tunku Abdul Rahman, Selangor, Malaysia

\*Corresponding author: hslee@utar.edu.my (ORCID: 0000-0003-1017-3434)

### Abstract

In developing countries, inadequate insurance and financial planning have led experts to call for government intervention to avoid potential financial crises. In Malaysia, where increasing insurance uptake is a national priority, this study examines how education and socio-economic factors influence financial concerns. Using a regression model, this study analyses data from 1,000 survey responses from Malaysia in the Global Findex database, examining the effects of education, income, gender, age, and urbanicity on various financial worries, including retirement, medical expenses, monthly bills, and education costs. Findings show that higher education levels are associated with reduced financial anxiety around medical expenses and monthly bills, while income and age significantly impact all financial worry areas. The study highlights the potential of incorporating insurance awareness and financial literacy into education to improve financial well-being and build a more resilient society. The novelty of this study highlights the need for targeted insurance policies that address the specific financial concerns of diverse socio-economic groups.

**Keywords:** Education, Financial Worries, Socio-economics, Financial Socialisation Theory, Insurance, Take-up Rate.

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## 1.0 Introduction

Insurance plays a crucial role in alleviating financial concerns and mitigating potential financial hardships. Insurance services offer individuals a sense of comfort and peace of mind by providing compensation for unexpected events. However, inadequate or absent insurance coverage can exacerbate financial anxieties and amplify the impact of misfortunes, underscoring the vital role of insurance in promoting financial resilience (Yu et al., 2025). Hence, education is crucial for enhancing financial literacy and equipping individuals with the knowledge and skills necessary to understand the terms in financial products (Ryu & Fan, 2023; Yap et al., 2024). A fundamental education enables people to understand the importance of insurance in easing financial concerns and protecting against potential financial crises. Furthermore, education empowers individuals to make informed choices about the adequacy of insurance coverage needed, ensuring their financial safety net aligns with their own needs. Conversely, limited education can lead to an inadequate understanding of financial matters, making individuals more susceptible to financial concerns and difficulties in unexpected situations. The recent trend of revolutionising financial inclusion through digital insurance complements the accessibility of traditional insurance. This means that comprehensive education not only equips people with the skills to understand traditional insurance but also enables them to effectively use digital financial services. Therefore, to strengthen the financial resilience of people in an ever-changing environment, they need to enhance their education to prepare them to use modern financial tools.

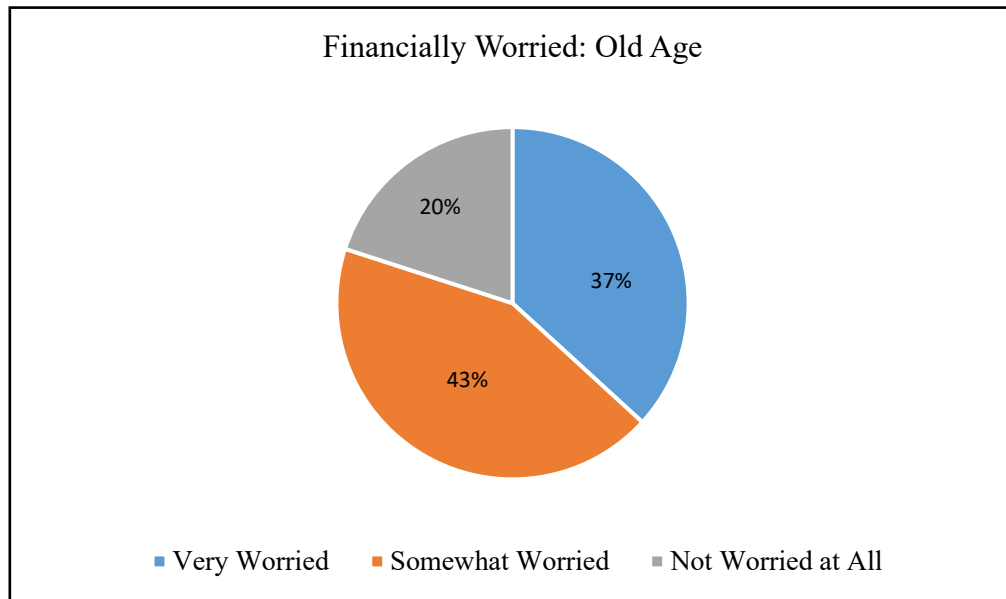
In recent years, many countries have faced growing financial pressures that have severely impacted their household stability (Razzaq et al., 2024; Yakubi et al., 2022). For instance, volatile economic conditions, inflation, and stagnant wages increase the financial worries of the people. As daily expenses surge while salary increments remain limited, individuals and families across socio-economic groups often struggle to maintain financial security. The socio-economic diversity in Malaysia amplifies this issue. For example, higher-income households may be better equipped to manage financial risks, while lower-income groups are adversely affected due to a lack of access to financial planning resources or insurance. Additionally, disparities in financial literacy across socio-economic diversity leave many individuals underprepared to take protective

measures such as buying insurance. This phenomenon intensifies anxieties across socio-economic segments.

The Financial Capability and Inclusion Demand Side Survey 2021, conducted by the Central Bank of Malaysia, indicates that there is scope for enhancing the financial literacy of Malaysians (Bank Negara Malaysia, 2022). The survey identifies key areas of concern, including financial knowledge, saving and budgeting habits, preparedness for unexpected life events, and retirement planning. In terms of personal financial risk management, only 50% of Malaysians report being able to generate emergency funds for unforeseen expenses. Moreover, a substantial portion of respondents lacks life insurance coverage for illness, death, or disability. Lower-income households face ongoing affordability challenges, with minimal funds remaining after covering basic needs. Compounding these issues, many Malaysians do not perceive insurance as an essential tool for managing personal financial risks; indeed, one in three respondents expressed a lack of interest in learning more about it. This insight underscores a crucial need for enhanced insurance information to promote financial literacy and address prevalent misconceptions.

Due to religious obligations, some Muslims avoid conventional insurance (Maduku & Mbeya, 2024). As a result, Takaful has emerged as a viable alternative, offering protection against financial challenges while aligning with Islamic principles. Takaful, an Islamic insurance model, complies with Shariah law by avoiding elements such as uncertainty (Gharar), speculation (Maisir), and interest (Riba). It operates on principles of mutual cooperation and shared responsibility, where participants contribute to a common fund, facilitating assistance during times of need (Lee et al., 2019). Serving as a means for Muslims to attain financial security and resilience, Takaful respects their religious beliefs. Recognising Takaful's importance for those seeking insurance alternatives, there has been an increase in educational initiatives aimed at raising awareness about its principles and benefits. Islamic financial institutions and scholars play a crucial role in educating the community about Takaful, helping individuals make informed decisions that align with their religious values.

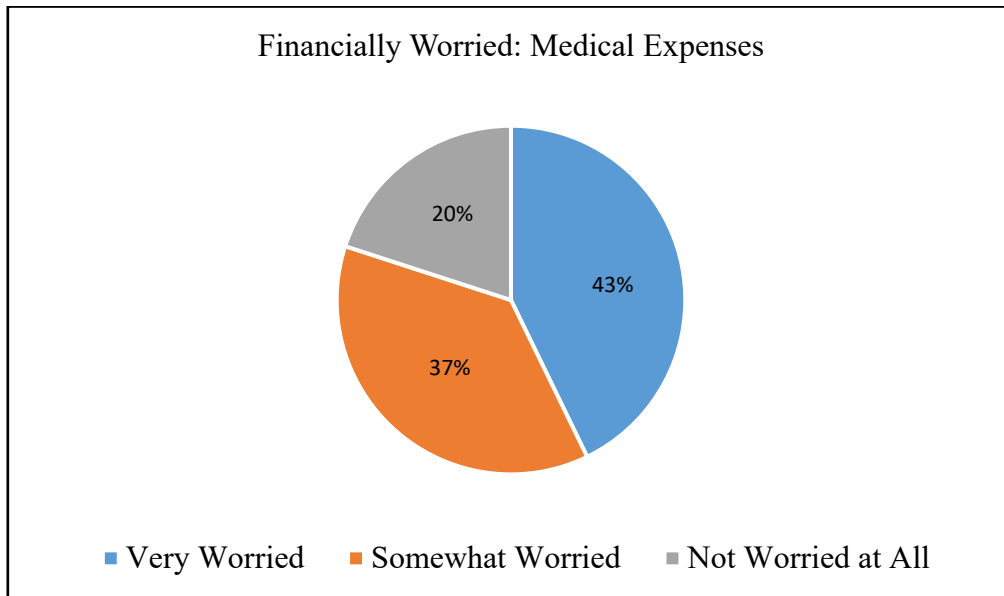
Using data from the Global Findex 2021, Figures 1 to 4 provide an overview of the financial worries status in Malaysia. Each figure represents a distinct type of financial concern—retirement (Figure 1), medical expenses (Figure 2), monthly expenses (Figure 3), and educational fees (Figure 4).



**Figure 1: Distribution of Malaysians who are Financially Worried due to Old Age**

**Source: Developed by Author**

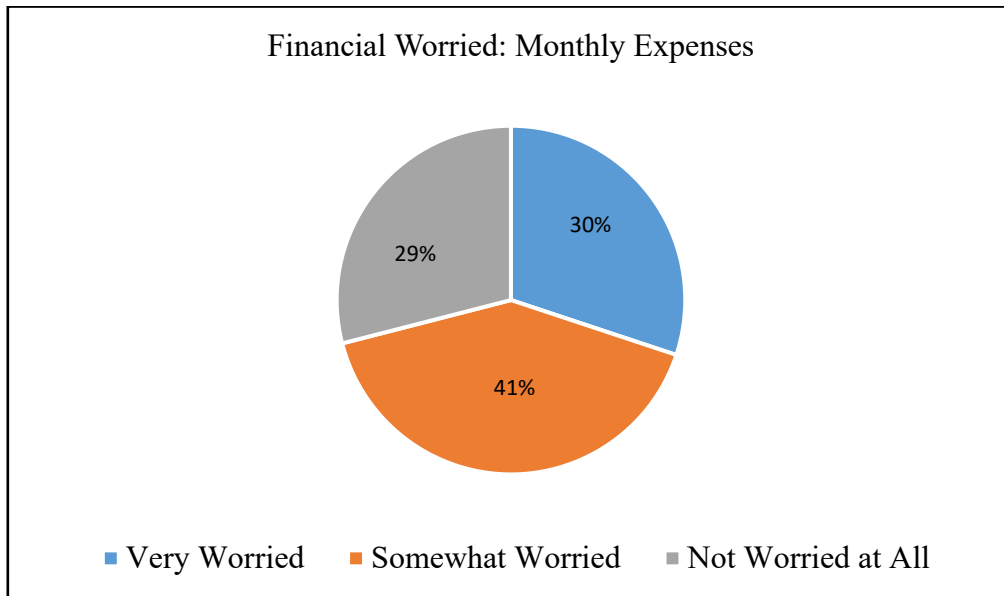
Figure 1 shows that 80% of respondents are concerned about having insufficient funds for old age (37% are very worried, and 43% are somewhat worried). This insight indicates a significant level of anxiety among Malaysians regarding their financial security in retirement. Figure 2 shows that 80% of respondents are worried about covering medical expenses, with 43% being very worried and 37% somewhat worried. This high level of concern suggests that healthcare affordability is a critical issue in Malaysia, which is understandable given the potential financial burden associated with medical emergencies, ongoing healthcare needs, and rising global healthcare costs.



**Figure 2: Distribution of Malaysians who are Financially Worried regarding Medical Expenses**

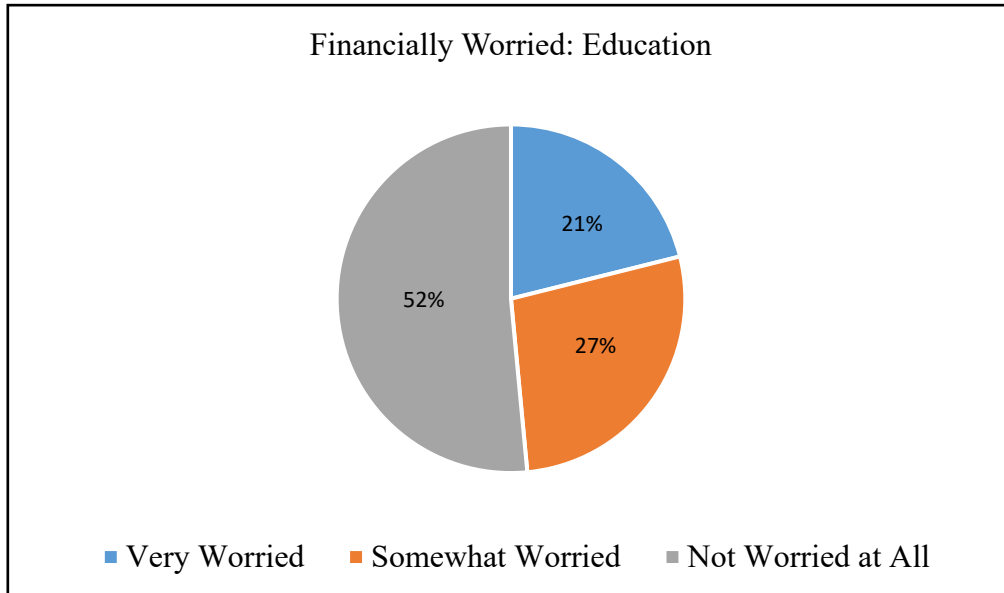
**Source: Developed by Author**

Figure 3 illustrates that 71% of respondents are concerned about having enough money for their monthly bills, with 30% being very worried and 41% somewhat worried. This high percentage indicates that financial stability and the ability to meet basic needs are significant concerns for many individuals and families in Malaysia. In contrast, respondents are less concerned about education fees, as 52% report no worry at all, as shown in Figure 4. This may be due to government programmes or financial assistance available to support education expenses.



**Figure 3: Distribution of Malaysians who are Financially Worried about Monthly Expenses**

**Source: Developed by Author**



**Figure 4: Distribution of Malaysians who are Financially Worried about Education Fees**

**Source: Developed by Author**

The Financial Capability and Inclusion Demand Side Survey 2021 reveals a concerning low level of digital financial literacy in Malaysia despite the rapid expansion of digital financial products and services (Bank Negara Malaysia, 2022). Over one-third of respondents report being vulnerable to online fraud, including the potential misuse of their accounts as "mule accounts" for fraudulent activities. Sustaining public confidence in digital financial services will require intensified education and awareness campaigns to enhance digital financial literacy, particularly in relation to protective measures that prevent online banking fraud. These campaigns will complement ongoing efforts by banks to enhance the security of online transactions. In light of financial socialisation theory and financial literacy theory, which suggest that individuals develop financial attitudes and behaviours through education (Pak et al., 2024), the quality and content of financial education emerge as crucial factors influencing financial worry levels. These situations emphasise the need for effective retirement planning, education, and policy interventions to address the root causes of financial concerns and build financial resilience across the population. Key areas of focus include retirement readiness, healthcare expense management, and promoting digital financial inclusion. This study prompts the following research questions: To what extent do financial socialisation theory and financial literacy theory elucidate the relationship between education and financial worries? How do socio-economic factors impact financial worries?

This study aims to investigate the impact of education on financial worries in areas such as old age, medical expenses, monthly bills, and education expenses in Malaysia. It also examines the influence of socio-economic factors, including income, gender, age, and urbanicity, on these financial concerns. Understanding the role of insurance in alleviating financial anxieties and the importance of education in enhancing financial literacy provides a basis for exploring how education contributes to financial resilience. The Central Bank of Malaysia has identified a gap in financial understanding and a lack of interest in insurance, highlighting an urgent need for educational initiatives to address misconceptions and improve financial knowledge among Malaysians. Furthermore, religious obligations affecting some Muslims' insurance choices highlight the importance of religious factors in financial decision-making. The rise of *Takaful*, a



Shariah-compliant insurance alternative, aligns with religious values, illustrating the role of education in promoting awareness of Islamic insurance principles.

By examining how education and socio-economic factors influence specific financial concerns, this study makes several key contributions to the existing literature on financial resilience and inclusion, particularly in relation to insurance uptake. First, it provides empirical evidence on the impact of education on financial worries, offering policymakers and educators valuable insights for improving financial literacy and reducing financial stress, thereby promoting insurance adoption. Second, this study expands current knowledge by exploring the role of socio-economic factors, such as income, gender, age, and urbanicity, in shaping financial worries, thereby promoting a better understanding of the drivers behind insurance adoption. By clarifying how these socio-economic factors contribute to financial anxiety, this research helps identify groups most vulnerable to financial instability. This understanding supports the development of targeted financial education and policy interventions, allowing financial institutions, government bodies, and community organisations to create support systems and resources that address the specific needs of each demographic group.

The novelty of this study lies in its detailed analysis of how education and socio-economic factors—specifically, income, gender, age, and urbanicity—shape financial worries in key areas, including old age, medical expenses, monthly bills, and education costs. Unlike previous studies (Ali & Ghildiyal, 2023; Roy & Patro, 2022), which focus on general financial inclusion, this research highlights how specific factors impact particular types of financial worries. Additionally, it recommends integrating financial literacy and insurance awareness into educational curricula to reduce financial anxieties and encourage proactive insurance adoption. The study also proposes a model for insurance providers to tailor policies to the specific needs of diverse demographics, offering a framework to enhance financial resilience across various populations and serving as a valuable resource for policymakers and financial institutions globally.

## **2.0 Literature Review and Hypotheses Development**

### **2.1 Theoretical Framework**

Financial socialisation theory and financial literacy theory form the foundation for understanding the relationship between education and financial worries, while life-course theory explains the influence of socio-economic factors on financial worries. Financial socialisation theory posits that individuals develop financial behaviours and attitudes through various socialisation agents, including family, peers, and educational institutions (Erdem & Rojahn, 2022; Shim et al., 2009). Higher educational attainment is often associated with exposure to more advanced financial concepts and practices, which influence financial behaviours and beliefs. As individuals progress through their education, they may develop a stronger sense of financial competence and confidence, helping to reduce financial worries. Additionally, higher education levels are frequently associated with increased income and financial stability, as individuals with advanced qualifications are more likely to secure higher-paying jobs, which can alleviate financial concerns. Education also gives individuals the knowledge and skills to make informed financial decisions, manage resources effectively, and diminish financial stress. Those with lower levels of education may face greater financial worries due to limited job opportunities and lower income potential. Moreover, education empowers individuals to navigate financial systems, access resources, and plan for the future, further reducing financial concerns.

Financial literacy theory suggests that understanding financial concepts, tools, and systems significantly shapes financial decision-making and behaviour (Lusardi & Mitchell, 2014). In today's digital age, the rapid rise of digital finance has added complexity to financial concerns, as technology plays an increasingly critical role in financial literacy, resource access, and decision-making across demographics. Digital financial literacy encompasses the knowledge and skills required to effectively navigate and utilize digital financial tools and services, including online banking, mobile payment apps, digital wallets, Insurtech, and other platforms (Yang et al., 2023). It is essential to link education with digital financial inclusion, empowering individuals to make informed financial decisions in the digital era (Lee et al., 2023). Digital financial inclusion seeks

to expand access to financial products and services, particularly for underserved populations, including those in rural areas or with limited access to traditional banking. Education supports digital financial inclusion by increasing awareness and understanding of digital tools and overcoming barriers to adoption, such as a lack of knowledge or trust in technology. Education in digital financial inclusion and insurance enhances individuals' confidence in navigating digital financial platforms, managing their finances responsibly, and protecting against financial risks (Li et al., 2020). Empowered individuals are more likely to engage with digital financial services and insurance products, enhancing their financial well-being and reducing financial worries. Therefore, based on financial socialisation theory and financial literacy theory, education equips individuals with the knowledge and skills necessary for informed financial decision-making, debt management, saving for the future, and retirement planning. These theories emphasise that education not only prepares individuals with specialised knowledge for their professions but also cultivates essential competencies, including financial literacy (Brüggen et al., 2017). Higher financial literacy levels are closely linked with reduced financial worries and improved financial well-being.

Life-course theory emphasises that an individual's experiences, decisions, and life transitions, shaped by socio-economic conditions, affect their financial outcomes and concerns over time (Kitson et al., 2022). It provides insight into how financial worries evolve across different life stages, highlighting the impact of age, income, gender, and urbanicity on financial concerns. Age is central to life-course theory, reflecting how financial worries shift across life stages; for example, younger individuals tend to focus on education costs and early career challenges, whereas older adults often face retirement, healthcare expenses, and legacy planning. Income is also a critical factor, as those with higher incomes generally have greater resources for financial planning, which can potentially reduce long-term financial stress across various life stages. Gender intersects with life-course experiences, with women, for instance, often facing career interruptions due to family responsibilities, impacting lifetime earnings, savings patterns, and specific financial anxieties distinct from those of men. Urbanicity further influences financial trajectories, as urban residents typically encounter higher living costs, which may limit financial planning capacity despite increased access to financial services. In summary, life-course theory emphasises the intricate interplay of socio-economic factors

that influence financial concerns at each life stage, providing valuable insights for developing targeted strategies to enhance financial security across diverse populations.

In summary, these theories examine the impact of education and socio-economic factors on financial worries in Malaysia, highlighting implications for insurance uptake. Financial socialisation and financial literacy theories suggest that education may reduce financial stress by enhancing financial competence and advancing digital financial inclusion. Life-course theory explains how socio-economic factors, such as age, income, and gender, influence financial concerns at various life stages, underscoring the need for targeted financial security strategies.

## **2.2 Empirical Studies and Hypotheses Development**

### **2.2.1 The Effect of Education on Financial Worries**

Education and financial worries are two major factors that significantly impact individuals and societies. Studies show a link between education and financial stress, with university-based financial education programmes effectively equipping students with the skills to manage finances and reduce financial anxiety (Elliott & Lewis, 2015). Such programmes positively influence students' financial behaviours and attitudes. A study by Amagir et al. (2020) found that participation in financial education programmes significantly improved financial knowledge and behaviours among high school students. Similarly, research by Sinnewe and Nicholson (2023) demonstrated that financial education programmes were associated with reduced financial stress and improved financial well-being among young adults. In addition to university programmes, research by Kaiser and Menkhoff (2020) indicates that financial education in schools can have a lasting impact on financial literacy and behaviour. Their study found that individuals who received financial education in high school were more likely to engage in positive financial behaviours, such as saving and investing, later in life. Moreover, a study by Niankara and Traoret (2023) highlighted the importance of structured financial education in helping individuals understand and manage financial stress and its effects on financial

outcomes. These empirical findings support the hypothesis that education is associated with financial concerns.

Higher levels of education often contribute to higher income and wealth accumulation over a person's lifetime. Individuals with advanced degrees or specialised training tend to have better job prospects and earning potential, enabling them to build substantial savings and investments for retirement (Niankara & Traoret, 2023; Ryu & Fan, 2023). As a result, they may experience fewer financial worries in old age compared to those with lower education levels, who may have encountered limited job opportunities and lower income potential throughout their careers. Education equips individuals with the knowledge and skills needed to make informed financial decisions and plan effectively for the future. Higher education is often associated with greater financial literacy, which enables individuals to navigate complex financial systems, understand investment options, and develop effective retirement plans. Consequently, educated individuals may feel more confident in their ability to manage finances in retirement, reducing their financial concerns. Education may also enhance the strength and composition of an individual's social support network, which can play a crucial role in mitigating financial concerns in old age. Educated individuals often have broader social networks, access to professional advice, and support systems that help them during times of financial uncertainty or adversity. Based on these observations, the following hypothesis is proposed:

H1a: Education is related to financial worries in old age.

Education also correlates with higher levels of health literacy, which includes understanding healthcare systems, medical conditions, and preventive measures (Tzeng et al., 2021). Individuals with higher levels of education may be more proactive in managing their health, seeking preventive care, and adopting healthy lifestyles. Consequently, they may face fewer medical emergencies or chronic conditions, resulting in lower medical expenses and reduced financial worries. Education can also impact access to healthcare services, as higher education levels are associated with better employment opportunities and higher incomes, which may enable individuals to secure

employer-sponsored health insurance or afford private healthcare coverage (DeRigne et al., 2019). In contrast, individuals with lower education levels may encounter barriers to accessing healthcare due to limited financial resources or a lack of insurance, leading to increased financial concerns related to medical expenses. Additionally, education is often linked to higher rates of health insurance coverage. Those with higher education levels may have a better understanding of the importance of health insurance and be better equipped to navigate the healthcare system to secure coverage. They may also have access to employer-sponsored health insurance plans or be more likely to purchase private insurance policies. Adequate health insurance coverage can mitigate financial worries associated with medical expenses by providing financial protection against unexpected healthcare expenses. Therefore, the following hypothesis is presented:

H1b: Education is related to financial worries regarding medical expenses.

Individuals with higher education levels may better understand personal finance principles, such as budgeting, expense tracking, and debt management. This skill set enables them to manage their monthly expenses effectively, which can help reduce financial worries. Education also influences attitudes and behaviours toward debt. Those with higher education levels may exercise greater caution when taking on debt and be better equipped to manage existing debt responsibly. In contrast, individuals with lower levels of education may be more likely to accumulate debt or face challenges with debt repayment, which can lead to financial worries about meeting their monthly obligations. Education can enhance financial resilience, enabling individuals to handle unexpected expenses or financial emergencies more effectively (Weissman et al., 2020). People with higher education levels may have access to savings accounts, emergency funds, or insurance policies that serve as a buffer against financial shocks. This resilience reduces concerns about how unexpected expenses might affect their ability to cover monthly expenses. Furthermore, an individual's level of education often influences their employment stability and job security. Individuals with higher education levels tend to secure more stable, better-paying jobs that offer benefits such as health insurance and retirement plans. This stability helps reduce concerns about income fluctuations and the

capacity to meet monthly expenses. Based on this rationale, the following hypothesis is proposed:

H1c: Education is related to financial worries regarding monthly expenses.

Higher levels of education often entail substantial costs, including tuition fees, books, supplies, and living expenses. Individuals pursuing advanced degrees or specialised training may face significant financial burdens, especially if they must rely on loans or personal savings to cover educational expenses. This can lead to financial worries about affording tuition fees and associated costs without incurring excessive debt or financial strain (Dev et al., 2023). While education equips individuals with the financial literacy skills and knowledge necessary to manage their finances effectively, the high cost of education may still pose challenges for budgeting and planning, particularly for those with limited financial resources or experience with complex financial transactions. This situation can lead to concerns about how to allocate limited funds for educational expenses while balancing other financial priorities and obligations. Based on these observations, the following hypothesis is proposed:

H1d: Education is related to financial worries regarding education fees.

### **2.2.2 The Impacts of Socio-economic Factors on Financial Worries**

Financial socialisation theory and Empirical studies have shown that socio-economic factors significantly influence financial worries, with income, age, gender, and urbanicity level being key determinants (Hasan et al., 2023; He & Zhou, 2022; Rizzato et al., 2023; Saalwirth & Leipold, 2023; Sujan et al., 2022). Research indicates that lower-income individuals experience higher financial worry due to limited economic resources, which constrain their ability to manage unexpected financial demands. For instance, Baker et al. (2020) found that income level significantly predicts financial stress, with those in lower income brackets facing heightened anxiety over expenses. Similarly, Guan et al. (2022) found that financial stress decreases as income increases, suggesting that income

security plays a crucial role in alleviating financial worry. However, Fenton-O'Creevy and Furnham (2022) suggest that high-income individuals often associate money with security and power, which may increase anxiety about maintaining financial status and managing investments effectively. Financial impulsiveness among high earners is also associated with financial stress, revealing unique concerns among wealthier groups despite their higher earnings. Based on these insights, this study proposes the following hypothesis:

H2: Income is related to financial worries.

Gender-based disparities in financial worry are also notable, with evidence suggesting that women experience higher financial stress than men, often due to income inequality and the dual burden of household and financial responsibilities. Wagner and Walstad (2023) found that women report more financial anxiety than men, likely due to these compounded economic and social pressures. Moreover, Ozili (2024) observed that gendered financial roles contribute to these disparities, with women generally being more concerned about household financial stability. Based on these findings, this study proposes the following hypothesis:

H3: Gender is related to financial worries.

The relationship between age and financial worry is well-documented, with younger adults often facing specific financial challenges, including student debt and early-career instability. Rahman et al. (2021) found that financial stress is particularly pronounced among younger adults due to concerns over job stability and debt management. Additionally, Kim and Chatterjee (2021) noted that older individuals generally report lower levels of financial worry, likely due to accumulated wealth and financial literacy gained over time. Accordingly, this study proposes the following hypothesis:

H4: Age is related to financial worries.

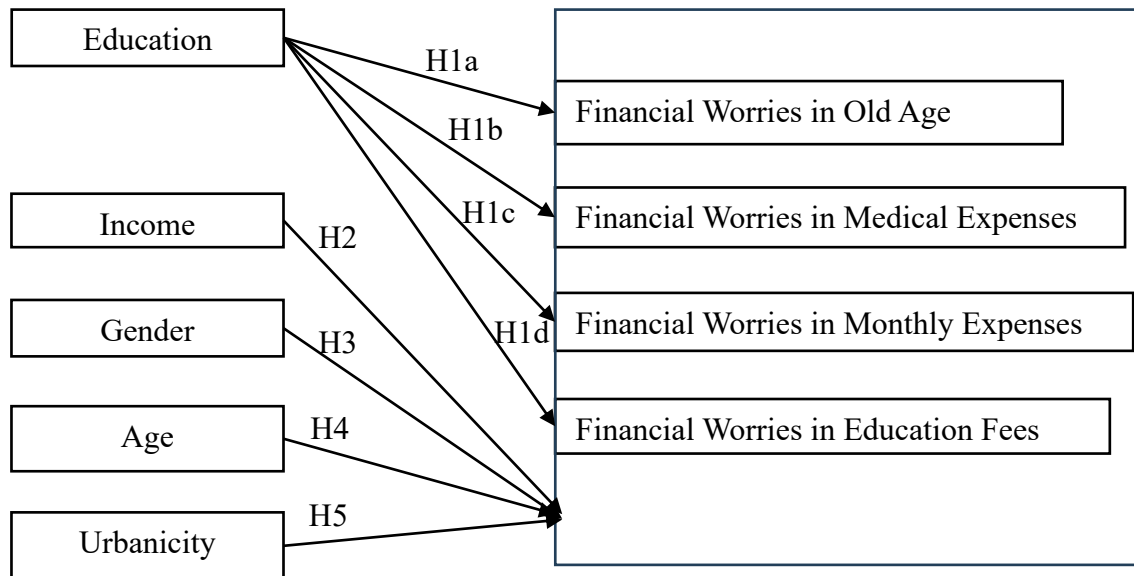


Financial stress tends to differ between urban and rural settings, largely driven by economic structures, living costs, and access to financial services. Disney et al. (2023) explore this dynamic in a rural Thai context, examining how household inequality and income disparities contribute to financial pressures across life cycles. Their findings highlight that rural households often face distinct financial challenges despite lower living costs, as limited access to income sources and financial services increases their dependency on remittances. Furthermore, Ning and Wang (2023) examine the role of financial technology in narrowing income disparities between urban and rural areas, emphasising that while digital finance can reduce this gap, urban residents still experience distinct financial stressors associated with high living costs. This disparity in financial pressures underscores how urban residents may face greater financial anxiety compared to rural populations, where income dynamics and living expenses are generally less burdensome. Similarly, Cailin, Tian, and Yuyang (2023) investigate how digital inclusive finance impacts income growth among urban and rural residents, finding that urban populations tend to benefit from digital financial services in ways that are distinct from rural counterparts. Despite these benefits, urban residents may still face heightened financial concerns due to the increased housing costs and economic pressures specific to urban environments. The research shows that while digital financial services enhance income growth and financial well-being, they do not completely offset the additional financial anxieties inherent in urban settings. Hence, this study suggests the hypothesis as follows:

H5: Urbanicity is related to financial worries.

In summary, this study introduces the research framework illustrated in Figure 5. This study employs a differentiated analytical approach informed by both theoretical and empirical considerations. Education is examined across four specific sub-dimensions of financial worry—old age, medical costs, monthly expenses, and education fees—because prior research suggests that education shapes financial behaviours in domain-specific ways, as outlined in financial socialisation and financial literacy theories (see Section 2.1). In contrast, socio-economic factors such as income, gender, age, and urbanicity are

analysed in relation to the overall construct of financial worry. These variables, informed by life-course theory, tend to exert broader and more structural effects on financial vulnerability. This analytical design allows us to capture both the targeted effects of education and the generalised influences of socio-demographic characteristics.



**Figure 5: Research Framework**

### 3.0 Methodology

This study uses data from the 2021 World Bank Global Findex analysis. The Global Findex database, initiated by the World Bank in 2011, compiles the most extensive dataset on adult savings, borrowing, payments, and risk management worldwide. The 2021 dataset includes data collected from over 150,000 individuals across 144 countries as part of nationally representative surveys. The 2021 Global Findex provides updated insights into the use of formal and informal financial services and access to these services. Data for Malaysia was collected by the World Bank from 17 December, 2021,

to 28 January, 2022, through landline and mobile phone interviews conducted in English, Malay, or Chinese. A total of 1,000 samples were collected from Malaysia.

When testing hypotheses 1a to 1d, the primary variable of interest is the level of education, coded as follows: 1 represents completion of primary school or less, 2 represents completion of secondary school, and 3 represents completion of tertiary education or higher. The dependent variable is financial worries, with specific hypotheses as follows: Hypothesis 1a addresses worries about insufficient funds for old age, Hypothesis 1b addresses concerns about medical expenses, Hypothesis 1c focuses on worries related to monthly expenses, and Hypothesis 1d focuses on concerns regarding education costs. The coding for these dependent variables is as follows: 1 indicates that the respondent is highly worried, 2 indicates moderate worry, and 3 indicates no worry at all. For hypotheses 2 to 5, the independent variables are income, gender, age, and urbanicity, respectively.

A regression model is used to analyse hypotheses 1 to 5, as formulated in equations 1 to 4. Data analysis is conducted using Stata software.

$$FWOA = f(\text{Education, Income, Gender, Age, Urbanicity}) \quad (1)$$

$$FWMC = f(\text{Education, Income, Gender, Age, Urbanicity}) \quad (2)$$

$$FWME = f(\text{Education, Income, Gender, Age, Urbanicity}) \quad (3)$$

$$FWEF = f(\text{Education, Income, Gender, Age, Urbanicity}) \quad (4)$$

Where,

FWOA = financial worry due to not having enough money for old age

FWMC= financial worry due to not having enough money for medical expenses

FWME = financial worry due to not having enough money for monthly expenses

FWEF = financial worry due to not having enough money for education fees

#### 4.0 Results and Discussion

Table 1 presents descriptive statistics on the demographic background of respondents. In terms of age distribution, 34.3% of respondents are in the 15–25 age group, 20.8% are in the 26–35 age group, 14.9% are in the 36–44 age group, and 30% are 45 years or older. Regarding educational attainment, 84.9% of respondents have completed at least a secondary level of education, indicating that most Malaysians possess a secondary education or higher. Examining income distribution reveals relatively equal representation across income categories. Specifically, 19.8% of respondents are in the lowest 20% income category, 17.3% in the second-lowest 20%, 18.2% in the middle 20%, 21.1% in the second-highest 20%, and 23.5% in the highest 20% category.

**Table 1: Descriptive Data of Variables Used in the Study**

<b>Variable</b>	<b>Mean</b>
<b>Education</b>	
Primary education or less	0.151
Secondary education	0.479
Tertiary education	0.370
<b>Income Quintiles</b>	
Quintiles 1	0.198
Quintiles 2	0.173
Quintiles 3	0.182
Quintiles 4	0.211
Quintiles 5	0.235
<b>Gender</b>	
Female	0.542
Male	0.458
<b>Age Group</b>	
15 to 25	0.343
26 to 35	0.208
36 to 44	0.149
≥45	0.300
<b>Urban residential Status</b>	
Urban	0.260
Rural	0.740

Table 2 presents the regression results for testing all hypotheses. Model 1 examines the impact of education level on financial worry associated with inadequate retirement funds. However, this relationship is not statistically significant. Despite the general national concern over insufficient retirement funds, individuals across various education levels may not adequately plan or prepare for retirement. This finding aligns with research by Amani et al. (2023), which indicates that a lack of comprehensive understanding of retirement planning influences retirement behaviours, especially among academics. Financial literacy in Malaysia may be relatively low, resulting in limited awareness or understanding of the importance of retirement savings (Chong et al., 2023). Consequently, individuals may not consider education level a significant factor in reducing financial worry related to retirement, contradicting hypothesis 1a, which proposed a connection between education and financial worries in old age.

**Table 2: Regression Results**

<b>Dependent Variables</b>	<b>(1) FWOA</b>	<b>(2) FWMC</b>	<b>(3) FWME</b>	<b>(4) FWEF</b>
Education	0.0524 (0.0379)	0.0818** (0.0393)	0.120*** (0.0402)	0.0574 (0.0405)
Income	0.109*** (0.0168)	0.103*** (0.0174)	0.0924*** (0.0178)	0.113*** (0.0179)
Gender	0.0523 (0.0447)	0.0511 (0.0464)	0.00915 (0.0474)	0.0677 (0.0478)
Age	0.0101*** (0.00150)	0.0101*** (0.00155)	0.00824*** (0.00159)	0.0139*** (0.00160)
Urbanicity	-0.0225 (0.0519)	-0.00805 (0.0538)	0.0115 (0.0550)	0.0134 (0.0555)
Constant	0.911*** (0.157)	0.789*** (0.163)	1.065*** (0.166)	1.114*** (0.168)
Observations	1,000	1,000	1,000	1,000
R-squared	0.089	0.081	0.065	0.113

**Note:** The value within the parentheses represents the standard error. Significance levels are denoted by \*\*\*, \*\*, and \* for p-values of 0.01, 0.05, and 0.1, respectively. FWOA = financial worry due to not having enough money for old age, FWMC= financial worry due to not having enough money for medical expenses, FWME = financial worry due to not having enough money for monthly expenses, FWEF = financial worry due to not having enough money for education fees, DFS = adoption of digital financial service

Model 2 analyses the relationship between education level and financial concern regarding medical expenses. The statistically significant positive coefficient at the 5% level suggests that higher education levels are associated with reduced financial worry over medical expenses. This outcome is consistent with findings by Tzeng et al. (2021). Higher education often leads to better job prospects and higher incomes, allowing individuals to secure jobs with comprehensive health benefits, thereby reducing out-of-pocket medical expenses and financial concerns. Additionally, higher education levels are linked to greater health literacy, with individuals more likely to understand the importance of preventive healthcare, including regular check-ups and healthy lifestyle choices. By prioritising preventive care, educated individuals may encounter fewer serious health issues, reducing medical expenses over time. Moreover, education equips individuals with financial planning skills, enabling them to budget for healthcare expenses, set aside savings for emergencies, and invest in health insurance. This preparedness can reduce the financial burden of unexpected medical expenses, supporting hypothesis 1b, which proposes a relationship between education and financial concerns regarding medical expenses.

Model 3 examines the influence of education on financial concerns related to monthly expenses. The statistically significant positive coefficient at the 1% level indicates that individuals with higher education levels tend to experience less financial worry regarding monthly expenses. Higher education equips individuals with financial literacy skills and knowledge of budgeting, saving, and investing, making them more adept at managing finances. This financial discipline helps them allocate resources effectively, covering monthly expenses and reducing financial worry. Similarly, Yu et al. (2022) show that financial fragility is higher among those with fewer years of education. In Malaysia, where the cost of living has steadily risen, higher education enables individuals to create and adhere to budgets, engage in financial planning, and build savings, which alleviates financial pressures associated with daily expenses. These results support hypothesis 1c, confirming that education correlates with financial worries related to managing monthly expenses.

Model 4 investigates the relationship between education level and financial worries about education expenses. The findings do not show statistical significance.

Government subsidies and financial aid programmes in Malaysia may help alleviate education costs for individuals across education levels, regardless of their educational attainment, which reduces the influence of education level on financial worry about education expenses. This result does not support hypothesis 1d, which proposed a connection between education and financial concerns related to the cost of education.

Across Models 1 to 4, income consistently shows a positive and significant impact at the 1% level on all areas of financial worry. This finding contrasts with research by Baker et al. (2020) in the American context, yet aligns with findings by Fenton-O'Creevy and Furnham (2022) in the United Kingdom. Higher income can increase financial worries as individuals often take on higher expenses and lifestyle costs, thereby elevating their monthly financial obligations. Concerns about insufficient funds for retirement or medical expenses can intensify as expectations for maintaining a standard of living or accessing high-quality healthcare rise. Additionally, those with higher incomes may face substantial education costs, which can lead to financial concerns about meeting these long-term goals. This study supports hypothesis 2.

Regarding age, Models 1 to 4 consistently show positive and significant coefficients at the 1% level, supporting hypothesis 4. This finding suggests that financial anxiety or concern tends to increase with age. It contrasts with the results by An et al. (2023), which found younger age groups particularly sensitive to financial security due to the COVID-19 crisis. However, older individuals often have more financial obligations, such as supporting dependents, managing mortgages, saving for retirement, and covering healthcare expenses, which may contribute to higher financial stress. As people approach retirement, concerns about savings, income management, and healthcare costs grow. Additionally, financial worries may rise with age due to increasing medical expenses and concerns about long-term care and life expectancy.

Gender and urbanicity do not show significant impacts on financial worries in Models 1 to 4, suggesting that these demographic factors do not substantially influence financial anxiety in Malaysia. This may indicate that economic pressures affect men and women equally, reflecting a convergence in financial challenges. Similarly, financial

worries appear consistent across urban and rural settings, possibly due to shared economic challenges or access to similar financial resources.

Overall, the analyses reveal the varying effects of education on different aspects of financial worry, consistent with financial socialisation and financial literacy theories, which highlight the importance of financial literacy and planning skills. This study shows that income and age are socio-economic factors influencing financial worries, as suggested by life-course theory. These findings imply that improving financial literacy and planning skills, particularly among varying income and age groups, could address specific financial concerns and promote insurance adoption. This aligns with the work by Chipunza and Fanta (2024), which demonstrates that formal asset accumulation and financial inclusion contribute positively to well-being and stability. For Malaysian households, similar mechanisms could mitigate financial anxiety, with access to formal financial systems potentially buffering against vulnerabilities associated with unexpected expenses. These results highlight the importance of promoting financial inclusion as a pathway to reducing financial stress across various demographic segments. By understanding how financial worries differ across life stages and economic backgrounds, insurance providers may tailor products and educational efforts to position insurance as a tool for managing long-term financial risks, such as healthcare costs and retirement savings, potentially increasing insurance uptake.

## **5.0 Conclusion**

In Malaysia, significant challenges arise from inadequate financial planning, insufficient insurance coverage, low adoption of digital financial services, and limited financial literacy. Recently, there have been calls to integrate digital financial literacy into school curricula. This study examines how education and socio-economic factors influence financial worries in Malaysia. The study finds that while education does not significantly affect financial worries related to retirement funds, it plays a critical role in reducing concerns about medical and monthly expenses. Individuals with higher education levels tend to experience less financial worry in these areas, likely due to improved financial literacy, planning skills, and higher incomes associated with advanced education. Income



and age also show a positive, significant impact on financial worries, highlighting the need for tailored financial planning and risk management strategies across age and income groups, particularly emphasising the role of insurance in addressing concerns related to aging, healthcare, and long-term financial goals.

Despite progress in digital financial inclusion, challenges remain in ensuring financial education reaches all segments of society. Efforts are ongoing to bridge educational gaps and increase financial literacy among the general public. Expanding access to financial knowledge and services can reduce financial anxieties and improve overall well-being. Addressing these gaps is essential for advancing financial inclusion and increasing insurance uptake, especially among vulnerable and underserved communities. By implementing comprehensive financial education initiatives, Malaysia can cultivate a more financially resilient population that is better equipped to manage financial uncertainties and confidently integrate insurance products into their financial planning.

### **5.1 Policy Implications**

Several policy implications are suggested. First, financial literacy education should be incorporated into the national curriculum from primary to tertiary levels. This should include topics such as understanding insurance or Takaful products, the importance of risk management, and how insurance or Takaful can help mitigate financial risks. Second, nationwide financial education campaigns should target students, parents, and educators to raise awareness about the benefits of insurance or Takaful coverage and its role in promoting financial stability. These campaigns should highlight the importance of education in fostering sound financial decision-making and encourage individuals to explore insurance or Takaful options. Third, partnerships between insurance companies and educational institutions—such as schools, colleges, and universities—could offer specialised courses or workshops on insurance, Takaful, and risk management. These initiatives would equip students with practical knowledge and skills related to insurance or Takaful, enabling them to make informed financial decisions. Fourth, to address financial worries across income and age groups, policies should focus on developing age-

specific and income-sensitive insurance products that support long-term needs such as retirement and healthcare costs. Fifth, improving digital and financial literacy across demographics can play a pivotal role in addressing financial concerns, particularly among groups experiencing low insurance uptake and financial vulnerability. Following the evidence presented by Amber and Chichaibelu (2023), which demonstrates how digital finance enhances female labor force participation in Pakistan, similar initiatives could be developed to empower underserved communities in Malaysia, bridging the digital divide and fostering increased engagement with digital financial tools. Targeted outreach for digital insurance and financial planning solutions could address specific socio-economic needs, ultimately strengthening the financial security framework across Malaysian demographics.

These policy recommendations provide actionable steps to address existing challenges and enhance financial resilience among Malaysians. This study contributes to efforts to enhance insurance and Takaful uptake, thereby fostering a financially inclusive society in Malaysia.

## **5.2 Theoretical Implications**

This study adds novelty by expanding financial socialisation theory to include education as a means to raise awareness of financial concerns and promote digital financial inclusion, encouraging insurance adoption. This research significantly broadens the understanding of how education can alleviate financial concerns while enhancing digital financial inclusion, as prior studies have often focused solely on inclusion. Additionally, financial literacy theory explains why individuals with lower education levels may experience greater financial worries, emphasising the role of insurance in alleviating these concerns. Furthermore, the study shows that financial worries evolve with age and income as socio-economic roles and financial responsibilities expand throughout the lifespan. This aligns with life-course theory, which proposes that age-related transitions and rising financial expectations contribute to financial concerns, emphasising the need for adaptive financial planning strategies. Understanding these life-stage influences can

inform policies and financial education tailored to address specific age-related financial anxieties, such as retirement and healthcare preparedness.

### 5.3 Limitations and Recommendations

The World Bank Global Findex survey data does not segment respondents by ethnicity, which limits the ability to compare the impact of education on financial worries and digital financial inclusion across Malay and non-Malay groups. This distinction is particularly relevant in the context of Malaysia, where the Employees Provident Fund reports average savings of RM 40,000 for Malays, RM 140,000 for Chinese, and RM 67,000 for Indians (KWSP, 2024). Future studies should aim to collect data from multiple ethnic groups to address this limitation, enabling more comprehensive comparisons and providing deeper insights. Additionally, future research might benefit from a longitudinal design to observe these impacts over time.

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