IJIRSS
International Journal of Innovative Research & Scientific Studies

ISSN: 2617-6548

URL: www.ijirss.com

Financing the future of elderly care: Understanding public acceptance of social insurance for long-term care

Nurul Afidah Mohamad[1], Chi Hau, Tan[2*], Ai Na, Seow[3], Sing Yan, Looi[4], Syarah Syahira Mohd Yusoff[5]
Halimah Awang[6]

[1,3]Teh Hong Piow Faculty of Business and Finance, Universiti Tunku Abdul Rahman, Malaysia.
[2]Centre for Management and Marketing, CoE for Business Innovation and Communication, Faculty of Management, Multimedia University, Malaysia.
[4]Faculty of Science, Universiti Tunku Abdul Rahman, Malaysia.
[5]Institute of Islamic Banking and Finance, International Islamic University Malaysia, Malaysia.
[6]Social Wellbeing Research Centre, University of Malaya, Malaysia.

Corresponding author: Chi Hau, Tan (*Email: tanchihau@mmu.edu.my*)

Abstract

With traditional family-based old-age care declining due to shrinking family structures, formal financial protection for the aging population is increasingly crucial. This is especially given the high cost of long-term care. Acknowledging the limitations of private insurance and tax-based systems, this study explores the potential of social insurance in Malaysia by examining factors influencing its public acceptance. Data collected from a total of 450 respondents were analyzed using SPSS for descriptive statistics and SmartPLS for hypothesis testing. The findings revealed that knowledge-based factors such as financial literacy and financial awareness do not exhibit a significant influence on financial attitude. In contrast, psychological factors such as precautionary motives and trust demonstrate a significant and positive influence on financial attitude. Furthermore, attitude emerges as a significant mediating variable that bridges the relationship between precautionary motives and acceptance, as well as between trust and acceptance. In a nutshell, this study contributes to the existing literature on long-term care financing from the lens of consumer behavior and offers valuable insights for policymaking in navigating the nation's aging population.

Keywords: Ageing population, Community development, Elderly, financing, Long-term care, Social insurance.

DOI: 10.53894/ijirss.v8i5.9269
Funding: This work is supported by the Ministry of Higher Education (MoHE), Malaysia (Grant number: FRGS/1/2023/SS06/UTAR/02/3).
History: Received: 11 June 2025 / **Revised:** 11 July 2025 / **Accepted:** 14 July 2025 / **Published:** 13 August 2025

Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.
Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.
Publisher: Innovative Research Publishing

1. Introduction

As a late-dividend country, Malaysia is characterized by an aging population with a low dependency ratio and a fertility rate that is below the replacement level [1]. In 2021, Malaysia entered the category of an aging society, with more than 7% of its population aged 65 and above. Sooner than expected, the country is projected to shift to the next phases of an aged society and a super-aged society in 2040 and 2057, respectively [2, 3].

During this demographic phase, the ageing-related challenges are certainly inevitable. In response, respective policies must be mapped with priority given to sustaining productivity growth while addressing the realities of an ageing population [4]. This includes policies regarding pension, healthcare, and long-term care systems.

One pressing issue that most developing Southeast Asian countries, including Malaysia, face is the lack of robust pension systems to prepare them for the challenges of an aging population [5, 6]. For instance, 58% of the working-age Malaysian adults are not covered by any form of old-age protection [7]. As a consequence, the nation is ill-prepared to provide economic and social security in an aging society, potentially leading to greater poverty risks among older adults in the near future.

In view of the weakening traditional family-based old-age care, which is driven by the shrinking family structure, it is evident that the role of formal old-age financial protection for the aging population is more critical now than ever. In navigating old age, individuals will experience a decline in their physical and cognitive abilities. Research has shown that in Malaysia, the prevalence of limitations in activities of daily living (ADL) and instrumental activities of daily living (IADL) was 17.0% and 42.9%, respectively [8]. These findings underscore the importance of financial planning to address the anticipated constraints of old age, especially given the substantial costs of long-term care. This may include access to specific financial products such as long-term care insurance (LTCI), which has been used by many developed aged countries such as Japan, South Korea, China, and Germany.

The financing structure of the LTCI system varies from one country to another. The options include private insurance, social insurance, a general tax-based system, as well as a private-public partnership [9, 10]. In the Malaysian context, private commercial insurance for aged care is not feasible due to the high payouts, which make it prohibitively expensive for insurers [11]. Meanwhile, relying on the general tax-based system, as is currently practiced, will be inadequate to meet the needs of an expanding older population. Even under the current means-tested coverage, the system has already stretched the country's fiscal capacity thin.

In view of these challenges, social insurance appears to be a promising option. Drawing on the success of such systems in other countries, this study aims to explore the potential adoption of a social insurance mechanism in Malaysia by investigating the factors influencing its acceptance as a viable mechanism to finance long-term care among the population.

2. Literature Review

2.1. Underpinning Theory and Conceptual Framework

The institutional theory offers valuable insights into social structures, norms, and shared beliefs that influence individual behaviors [12]. Institutions thrive on three key pillars: regulative (laws and policies), normative (social expectations), and cognitive (cultural beliefs and perceptions). The cognitive pillar emphasizes that individuals' ingrained mental models and societal understandings influence decision-making and steering behavior beyond permissible or social expectations. Such a cognitive aspect is important when considering the acceptance of social insurance for long-term care. The study emphasizes that individuals' perceptions of financial literacy, financial awareness, precautionary motives, and trust in financial systems can significantly affect individuals' financial attitudes and the acceptance of social insurance for long-term care.

Figure 1 below illustrates the nine hypotheses (H1 – H9) that associate the relationship of financial attitude antecedence with the acceptance of social insurance for long-term care. In addition, financial attitude plays a mediating role that links the mechanism between its antecedents and social insurance acceptance.

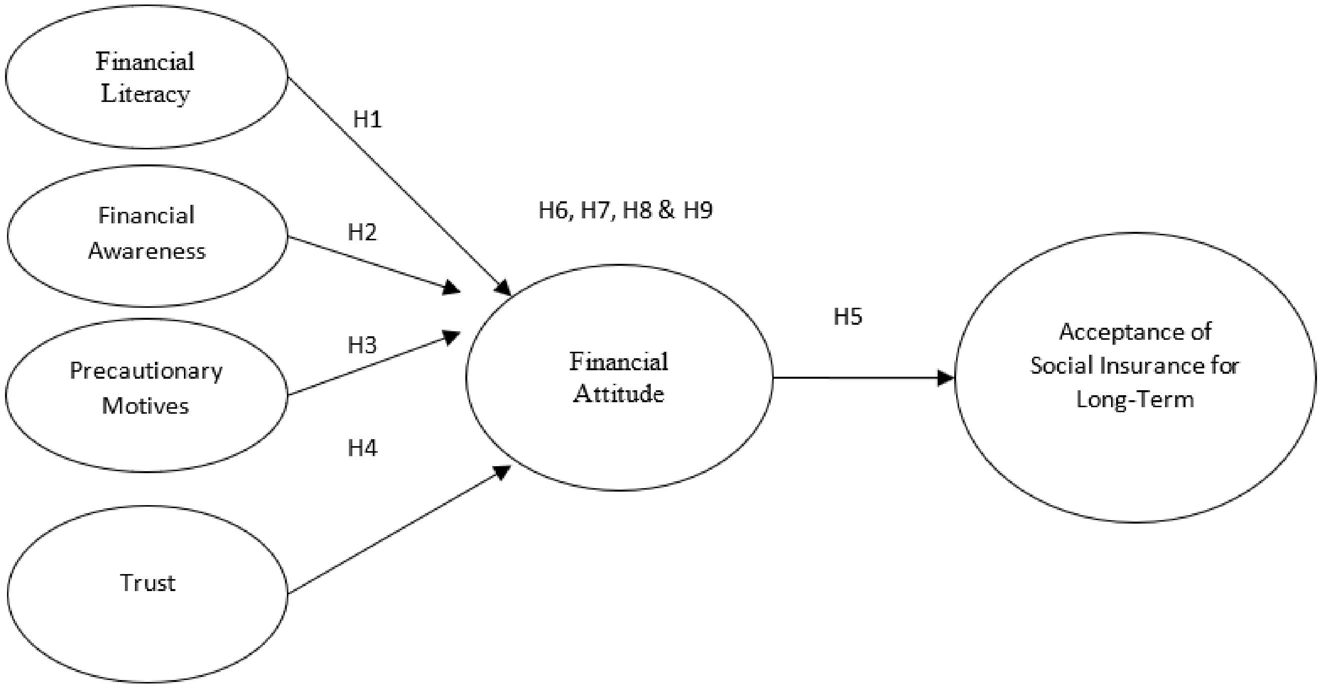

Figure 1.
Conceptual Framework.

2.2. Hypothesis Development

2.2.1. Financial Literacy and Financial Attitude

In the context of LTCI, financial literacy is particularly crucial as it enables individuals to evaluate insurance options, understand policy terms, and plan for future healthcare expenses. Financial literacy involves acquiring and applying financial knowledge and skills to make informed and effective financial decisions, ultimately enhancing financial well-being. Within this framework, financial attitude encompasses an individual's mindset and feelings toward financial matters, which in turn influence their financial behaviors [13].

[14] emphasized the connection between financial literacy and financial attitudes, noting that individuals with a solid understanding of financial concepts are more likely to develop positive financial attitudes. Those with a positive attitude toward money tend to make better financial decisions and adopt responsible financial practices. This mindset influences various aspects of financial behavior, including effective personal budgeting and long-term financial planning, such as savings strategies and decisions related to long-term care insurance. Empirical evidence indicates that individuals with elevated financial literacy are more proficient in managing immediate financial obligations and demonstrate enhanced accountability in long-term financial planning [14-19]. Therefore, the following hypothesis is formulated:

$H_{1:}$ Financial literacy has a positive effect on financial attitude toward the acceptance of social insurance for long-term care.

2.2.2. Financial Awareness and Financial Attitude

Financial awareness in LTCI involves recognizing the importance of future healthcare costs and actively seeking relevant financial knowledge to prepare for long-term care needs. Financial awareness involves recognizing financial matters and actively seeking financial knowledge. It reflects an individual's focus on financial issues to acquire relevant knowledge and stay informed about financial practices [20]. Financial awareness has a significant influence on an individual's financial attitude [21, 22]. A strong foundation in financial awareness enhances an individual's ability to evaluate risk and make prudent financial decisions regarding long-term care planning. Individuals with greater awareness are also more likely to take proactive steps such as purchasing LTCI policies, contributing to savings plans, and engaging in financial behaviors that ensure future financial security.

This awareness not only helps individuals understand financial concepts but also enables them to apply that knowledge in real-life situations, improving their financial management and long-term planning. Financial awareness is closely connected to financial attitude, which represents an individual's mindset, opinions, and assessment of financial matters [23]. A strong financial attitude, combined with adequate financial awareness, reduces the likelihood of errors in financial management practices and promotes responsible financial behaviors.

Studies show that higher financial awareness is associated with increased savings balances, lower credit card delinquency rates, and greater savings in individual retirement accounts [20]. Research also indicates that financial awareness and satisfaction with community governance contribute positively to engagement with community facilities [24]. Furthermore, financial awareness plays a crucial role in financial inclusion by enhancing individuals' ability to access financial services, make informed decisions, and benefit from government initiatives [25]. Therefore, the following hypothesis is formulated:

H_2: Financial awareness has a positive effect on financial attitude toward the acceptance of social insurance for long-term care.

2.2.3. Precautionary Motive and Financial Attitude

Precautionary motives play a significant role in shaping financial behaviors, particularly in how individuals manage risks through their financial portfolios. This influence is evident as such motives directly inform portfolio choices, leading individuals to allocate assets to mitigate future uncertainties [26]. This aligns with observed trends where saving motives are strongly linked to demand for life insurance, highlighting the proactive steps individuals take in anticipation of future financial needs [27]. Individuals who perceive higher vulnerability to risks and fear potential losses are more likely to engage with insurance products [2]. Short-term precautionary motives might discourage some from utilizing traditional saving intermediaries, leading many to opt for insurance as a more direct form of risk management [28].

While precautionary motives are noted to significantly influence financial attitude, the functionality of consumption insurance to adequately cover these risks remains limited, as LUO [29]. Furthermore, the relationship between precautionary saving motives and the effects of social insurance policies on savings may be overemphasized in the literature. This suggests a need for a more nuanced understanding of how these motives affect financial attitudes toward insurance coverage [30]. Therefore, the following hypothesis is formulated:

H_3: Precautionary motive has a positive effect on financial attitude toward the acceptance of social insurance for long-term care.

2.2.4. Trust and Financial Attitude

Trust is essential for healthcare engagement, shaping patient behavior and treatment adherence. Patients who trust their healthcare providers exhibit a greater willingness to seek care and adhere to prescribed treatments, thereby improving treatment efficacy and participation in preventive healthcare [31]. Conversely, a deficiency in trust toward healthcare providers and policymakers can significantly hinder the effectiveness of healthcare initiatives, reducing participation and compliance with recommended health programs [32]. Trust is also closely linked to perceptions of provider competence, where individuals are more likely to engage with healthcare services when they believe providers are capable of delivering high-quality care [33]. This underscores the need for healthcare institutions and policymakers to foster trust through transparency and consistent delivery of quality healthcare services.

In the context of LTCI, trust plays a pivotal role in influencing individuals' decisions to enroll in such programs. The long-term nature of LTCI often raises concerns regarding the reliability of insurers, contributing to lower adoption rates among potential beneficiaries [34]. A lack of trust is particularly detrimental, as it reduces the likelihood of LTCI purchases, even when individuals recognize the potential benefits of financial protection against future health risks [35]. Public trust in LTCI is closely tied to knowledge of insurance policies and satisfaction with existing schemes, emphasizing the need for policymakers and insurance providers to enhance transparency and customer confidence [36, 37]. Ultimately, trust remains a foundational element in ensuring successful engagement with healthcare services and financial security mechanisms, underscoring the need for sustained efforts to enhance public confidence in these institutions. Therefore, the following hypothesis is formulated:

H_4: Trust has a positive effect on financial attitude toward the acceptance of social insurance for long-term care.

2.2.5. Financial Attitude and Acceptance of Social Insurance for Long-Term Care

Acceptance and purchase decisions of LTCI are largely influenced by an individual's cognitive and emotional evaluations of its necessity and benefits. These financial attitudes are shaped by several factors, including perceived need, awareness of LTCI advantages, and broader financial considerations [15, 35, 38]. Individuals who perceive a higher need for LTCI and understand its benefits are more likely to develop favorable attitudes toward its adoption.

Positive financial attitudes significantly influence consumers' decisions to purchase insurance products, as individuals with favorable perceptions are more inclined to recognize the value of such products in mitigating financial risks [39]. Individuals with a proactive financial mindset are more likely to recognize the importance of securing LTCI early to mitigate future risks associated with long-term care expenses [40]. Those who prioritize long-term financial planning are more inclined to invest in LTCI as a means of ensuring financial security and reducing dependency on personal savings or family support. Therefore, the following hypothesis is formulated:

H_5: Financial attitude has a positive effect on the acceptance of social insurance for long-term care.

2.2.6. Financial Attitude as Mediating Variable Influencing the Acceptance of Social Insurance for Long-Term Care

Previous sections have discussed several key antecedents to attitude. In addition to its role as a dependent variable, the existing literature also highlights the pivotal role of attitude as a mediating variable influencing the acceptance or adoption of a certain behavior. This mediating function is particularly prevalent in the context of technology adoption, as documented in studies employing the Technology Acceptance Model (TAM). Drawing on the framework, Sun et al. [41] found that attitude significantly mediates the relationship between cognitive variables and the intention to participate in long-term care insurance in China. In another setting, attitude has also been shown to mediate the effect of financial literacy on financial behavior [42, 43]. In the same vein, Weedige et al. [6] suggested that favorable attitudes mediate the relationship between trust and the intention to purchase personal insurance. While there are limited studies that directly examine the mediating role of attitudes in the relationship between financial awareness or precautionary motives and financial behavior, existing evidence suggests individual linkages between awareness and attitude, precautionary motives and attitude, and attitude and behavior. This provides a compelling rationale to explore the potential mediating role of attitude between its antecedents (financial literacy, financial awareness, precautionary motives, trust) and the acceptance of social insurance for long-term care. Accordingly, the following hypotheses are formulated:

H_{6}: Financial attitude mediates the relationship between financial literacy and acceptance of social insurance for long-term care.

H_{7}: Financial attitude mediates the relationship between financial awareness and acceptance of social insurance for long-term care.

H_{8}: Financial attitude mediates the relationship between precautionary motive and acceptance of social insurance for long-term care.

H_{9}: Financial attitude mediates the relationship between trust and acceptance of social insurance for long-term care.

3. Methodology

The present study population consists of Malaysians aged 18–59 from five selected states in Malaysia who own at least one life and/or health insurance. The sampling method used for the study is judgmental sampling. Six hundred hard and soft copy survey forms were distributed to the targeted participants, and 465 responses were received, with a 77.5% response rate. After data cleaning, 450 responses were analyzed using SPSS for descriptive statistics and SmartPLS for hypothesis testing.

3.1. Measurement

Data collection for the present study was carried out using a survey questionnaire. The questionnaire was developed by adapting previously established items in the literature. The study used six variables: financial literacy, financial awareness, precautionary motives, trust, financial attitude, and long-term care insurance acceptance, measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire items were adapted from previous literature, namely [26, 44-48].

3.2. Data Analysis

Data analysis consisted of two steps: descriptive statistics and multiple regression analysis. To examine the relationships between multiple variables and evaluate them simultaneously, the structural equation modeling (SEM) approach, specifically partial least squares structural equation modeling (PLS-SEM), is used in this study due to the explanatory-predictive nature of the study [49]. The first stage of data analysis begins with assessing the measurement model, which includes evaluating the constructs' reliability and validity, namely composite reliability, convergent validity assessed by using average variance extracted (AVE), and discriminant validity assessed by using the Heterotrait-Monotrait ratio of correlations (HTMT) [50]. The second stage of data analysis focuses on assessing the structural model. This involves examining the strength and significance of the relationships between exogenous and endogenous variables, assessed using path coefficients. To examine the extent of the influence of exogenous variables on the change in endogenous variables, R-squared (R^2) was tested [51].

4. Results

4.1. Demographic Profiling

Table 1 lists all the demographic profiles, such as the respondent's current state, gender, age, occupation sector, marital status, ethnicity, education level, and income level.

Table 1.
Demographic Profiles.

	Category	**Frequency**	**Percentage**
State	Selangor	143	31.8
	Kuala Lumpur	80	17.8
	Johor	70	15.6
	Penang	69	15.3
	Perak	88	19.6
Gender	Male	190	42.2
	Female	260	57.8
Age	18 – 24	65	14.4
	25 - 34	150	33.3
	35 – 44	173	38.4
	45 – 54	56	12.4
	55 - 59	6	1.3
Occupation sector	Public sector	91	20.2
	Private sector	240	53.3
	Self-employed	46	10.2
	Unemployed	18	4.0
	Student	55	12.2
Marital status	Single (never married)	193	42.9
	Married	247	54.9
	Divorced	10	2.2
Ethnicity	Malay	175	38.9
	Chinese	243	54.0
	Indian	20	4.4
	Others	12	2.7
Education level	Secondary / High school	49	10.9
	Diploma or the equivalent	57	12.7
	Undergraduate	184	40.9
	Postgraduate	159	35.3
	Others	1	0.2
Monthly income	RM0 - RM4849	226	50.2
	RM4850 - RM10959	170	37.8
	RM10960 and above	54	12.0
Do you have an elderly to care for at home?	Yes	243	54.0
	No	207	46.0

4.2. Measurement Model Assessment

All constructs were evaluated in reflective construct mode. The essential assessments for the measurement model include latent variable internal consistency, convergent validity, and discriminant validity [49]. Table 2 presents the first two assessments, with composite reliability being above 0.7, which is considered acceptable for internal consistency. Convergent validity was evaluated using the factor loadings and average variance extracted (AVE). The outer loadings exceeded the threshold value of 0.7 and ranged from 0.767 to 0.983, and four items (FA3, FAT1, FAT3, & T6) were deleted due to low outer loading. The AVE values were above the minimum of 0.5, thus indicating sufficient convergent validity.

Table 2.
Convergent Validity of Constructs.

Construct	Construct Acronym	Factor Loading	Composite Reliability	AVE
Long-term Care Insurance Acceptance (A)	A1	0.868	0.937	0.795
	A2	0.928		
	A3	0.911		
	A4	0.873		
	A5	0.877		
Financial Awareness (FA)	FA1	0.983	0.966	0.899
	FA2	0.956		
	FA4	0.931		
	FA5	0.920		
Financial Attitude (FAT)	FAT2	0.858	0.794	0.711
	FAT4	0.767		
	FAT5	0.899		
Financial Literacy (FL)	FL1	0.831	0.901	0.698
	FL2	0.859		
	FL3	0.800		
	FL4	0.878		
	FL5	0.806		
Precautionary Motives (PM)	PM1	0.839	0.897	0.704
	PM2	0.888		
	PM3	0.791		
	PM4	0.857		
	PM5	0.817		
Trust	T1	0.799	0.891	0.656
	T2	0.822		
	T3	0.819		
	T4	0.787		
	T5	0.822		

Next, Table 3 shows that the heterotrait-monotrait (HTMT) ratio confirmed each construct's discriminant validity since all the values were less than 0.85 [52]. Therefore, it indicates that the measurement model meets validity conditions.

Table 3.
Discriminant Validity of Latent Constructs (HTMT) Matrix.

	A	FA	FAT	FL	PM	T
A						
FA	0.370					
FAT	0.433	0.459				
FL	0.430	0.525	0.413			
PM	0.485	0.579	0.696	0.460		
T	0.533	0.294	0.318	0.480	0.235	

Note: A = long-term care insurance acceptance; FA = financial Awareness; FAT = financial attitude; FL = financial literacy; PM = precautionary motives; T = trust

4.3. Structural Model Assessment

Table 4 indicates the result of the path analysis. There were two insignificant paths and three significant paths. The results posited that precautionary motives (β=0.494, t=7.927, p<0.05), and trust (β=0.122, t=2.955, p<0.05) were positively related to desire. In contrast, financial literacy (β=0.068, t=1.545, p>0.05) and financial awareness (β=0.075, t=1.270, p>0.05) were not significantly related to financial attitude. Thus, hypotheses 3 and 4 were supported by data, but hypotheses 1 and 2 were not supported. Apart from this, financial attitude (β=0.382, t=7.935, p<0.05) was positively related to long-term care insurance acceptance. Hence, hypothesis 5 was supported by data. Furthermore, the R^2 values indicate that 38.1 percent of the variation in financial attitude was explained by financial literacy, financial awareness, precautionary motives, and trust, while only 14.6% of the variation in long-term care insurance acceptance was explained by financial attitude.

Table 4.
Structural Model Assessment Results.

Hypothesis	Path Coefficient	T Statistics	P-Value	Results
H1: FL → FAT	0.068	1.545	0.061	Not Supported
H2: FA → FAT	0.075	1.270	0.102	Not Supported
H3: PM→ FAT	0.494	7.927	0.000	Supported
H4: T → FAT	0.122	2.955	0.002	Supported
H5: FAT → A	0.382	7.935	0.000	Supported

Note: A = long-term care insurance acceptance; FA = financial awareness; FAT = financial attitude; FL = financial literacy; PM = precautionary motives; T = trust.

The indirect effects are displayed in Table 5. The findings suggest that the financial attitude toward long-term care insurance is a crucial mediator in the relationship between precautionary motives and long-term care insurance acceptance, as well as the trust in long-term care insurance and its acceptance. Consequently, the results support H6 and H7.

Table 5.
Hypotheses with Mediation.

Hypothesis	Path Coefficient	T Statistics	P-Value	Results
H4: FL → FAT → A	0.026	1.484	0.069	Not Supported
H5: FA → FAT → A	0.029	1.267	0.103	Not Supported
H6: PM→ FAT → A	0.189	4.634	0.000	Supported
H7: T → FAT → A	0.047	2.545	0.005	Supported

Note: A = long-term care insurance acceptance; FA = financial awareness; FAT = financial attitude; FL = financial literacy; PM = precautionary motives; T = trust.

5. Discussion

This study presents noteworthy findings whereby knowledge-based factors such as financial literacy and financial awareness do not exhibit a significant influence on financial attitude. In contrast, psychological factors such as precautionary motives and trust demonstrate a significant and positive influence on financial attitude.

The significance of precautionary motives as an antecedent to attitude suggests that fear and concern play a prominent role in shaping individuals' attitudes toward social insurance for long-term care. This effect is likely amplified in contexts involving abstract and uncertain issues such as long-term and elderly care, particularly when the associated financial implications are substantial.

Meanwhile, as another critical factor, trust will inherently develop positive attitudes towards social insurance plans. In contrast, a lack of trust often leads to pessimism, adverse perceptions, and ultimately negative attitudes. Undeniably, trust lays a strong foundation that facilitates individuals' willingness to engage in financial instruments for healthcare services. Consequently, this highlights the importance of strategic efforts to enhance public trust and confidence in the designated provider of social long-term care insurance.

This study finds that attitude plays a pivotal role in influencing public acceptance of social insurance for long-term care financing. Furthermore, attitude emerges as a significant mediating variable that bridges the relationship between precautionary motives and acceptance, as well as between trust and acceptance. These results underscore the importance of policymakers to focus on initiatives that cultivate positive attitudes toward such long-term care financing plans in order to increase the acceptance rate among the public.

These findings offer a valuable perspective, particularly in the context of public acceptance of social insurance for long-term care financing. First, it is important to note that the concept of social insurance for long-term care financing remains relatively unfamiliar to most Malaysians. Second, although the aging population has led to a growing number of individuals becoming caregivers to their frail elderly family members, those with direct first-hand caregiving experience are relatively limited. These scenarios provide plausible explanations for the limited impact of knowledge-based factors on financial attitudes and, hence, the public acceptance of social long-term care insurance. It also lends support to existing literature in emerging markets, which suggests that people are more motivated to act when they are emotionally invested, rather than solely guided by information [53].

In assessing new financial instruments (in this context, social insurance for long-term care), the above findings indicate that in early-stage markets, the psychological factors, such as precautionary motives and trust, tend to outweigh the informational factors. It further highlights that human behavior is not purely rational. In the context of long-term and elderly care in this study, emotional considerations appear to play a more central role in shaping attitudes and influencing acceptance.

6. Implications and Limitations

This study carries significant policy implications for countries undergoing demographic transition due to population aging. The relevance is particularly pronounced for emerging countries, such as Malaysia, which is concurrently facing fiscal constraints in managing rising healthcare expenditures. With projections highlighting a further increase in these costs, it is timely for the country to explore strategic solutions to address the challenge. Drawing lessons from developed countries that have experienced the aging phase, the implementation of social long-term care insurance emerges as a feasible policy option. In view of this, this study offers timely and relevant insights that can inform policymakers in considering the adoption of social insurance mechanisms to support long-term care financing for the Malaysian population. However, this study is not without limitations, mainly the respondents' limited exposure to the concept of social long-term care insurance. To mitigate potential bias, the concept was introduced in simple language on the front page of the questionnaire. This was done to ensure that respondents had a basic understanding of the subject matter before completing the survey.

7. Conclusion

Based on the findings, this study concludes that if the social long-term care insurance were to be introduced as part of the national social security system, it is crucial for policymakers to devise initiatives aimed at fostering positive attitudes among citizens toward this form of insurance. This is particularly important given that attitude was found to significantly influence acceptance. Admittedly, cultivating the required positive attitudes may be challenging. However, the study also reveals that psychological factors such as the precautionary motive and trust are more salient, reinforcing the notion that emotional factors often play a central role in shaping attitudes toward complex and unfamiliar financial products.

Therefore, a strategic approach would be to design the insurance scheme in a way that addresses the public's precautionary concerns and builds trust in the system. Although this study did not find financial literacy and awareness to have a significant influence on attitudes, likely due to the novelty of the concept, such knowledge-based factors are expected to become increasingly crucial in the long run. Accordingly, efforts to address precautionary motives and trust should be complemented by initiatives to enhance financial literacy and public awareness of social long-term care insurance.

As one of the early studies exploring the viability of social insurance for long-term care financing in Malaysia, this research lays the groundwork for further research in this area. For instance, future research could examine other determinants, such as perceived affordability of contributions, which is likely to be a factor for public acceptance. In addition, a qualitative research approach could offer more in-depth insights into public acceptance of social long-term care insurance. In a nutshell, this study contributes to the existing literature on long-term care financing from the lens of consumer behavior and offers valuable insights for policymaking in navigating Malaysia's aging population.

References

[1] Department of Statistics Malaysia (DOSM), "Current population estimates, Malaysia," 2024. https://www.dosm.gov.my/portal-main/release-content/current-population-estimates

[2] S. Hinck and P. Steinorth, "Insurance demand in the presence of loss-dependent background risk," *Journal of Risk and Insurance,* vol. 90, no. 4, pp. 991-1026, 2023. https://doi.org/10.1111/jori.12426

[3] R. M. Yunus, H. Johar, and D. Katiman, "In search for a sustainable and equitable long-term care for Malaysia," *Journal of Aging & Social Policy,* vol. 35, no. 6, pp. 743-755, 2023. https://doi.org/10.1080/08959420.2022.2049575

[4] World Bank, "Live long and prosper: Aging in east asia and pacific," World Bank, 2016.

[5] International Labour Organization (ILO), "Old-age income security in ASEAN member states - policy trends, challenges and opportunities," International Labour Organization (ILO) – Association of Southeast Asian Nations (ASEAN), 2020.

[6] S. S. Weedige, H. Ouyang, Y. Gao, and Y. Liu, "Decision making in personal insurance: Impact of insurance literacy," *Sustainability,* vol. 11, no. 23, p. 6795, 2019. https://doi.org/10.3390/su11236795

[7] Free Malaysia Today (FMT), "40% of 17 million workforce not covered by EPF," 2024. https://www.freemalaysiatoday.com/category/nation/2024/03/03/40-of-17-million-workforce-not-covered-by-epf

[8] N. A. Mahmud *et al.*, "Influence of social support on limitation in daily living among older persons in Malaysia," *Geriatrics & gerontology international,* vol. 20, pp. 26-32, 2020. https://doi.org/10.1111/ggi.14029

[9] A. J. He, J. Qian, W.-s. Chan, and K.-l. Chou, "Preferences for private long-term care insurance products in a super-ageing society: a discrete choice experiment in Hong Kong," *Social Science & Medicine,* vol. 270, p. 113632, 2021. https://doi.org/10.1016/j.socscimed.2020.113632

[10] J. C. Rhee, N. Done, and G. F. Anderson, "Considering long-term care insurance for middle-income countries: Comparing South Korea with Japan and Germany," *Health Policy,* vol. 119, no. 10, pp. 1319-1329, 2015. https://doi.org/10.1016/j.healthpol.2015.06.001

[11] S. Pillai, "Elderly care insurance not commercially viable in Malaysia," 2023. https://codeblue.galencentre.org/2023/08/elderly-care-insurance-not-commercially-viable-in-malaysia/

[12] W. R. Scott, "Institutional theory: Contributing to a theoretical research program," *Great Minds in Management: The Process of Theory Development,* vol. 37, no. 2, pp. 460-484, 2005.

[13] A. C. G. Potrich, K. M. Vieira, and W. Mendes-Da-Silva, "Development of a financial literacy model for university students," *Management Research Review,* vol. 39, no. 3, pp. 356-376, 2016. https://doi.org/10.1108/MRR-06-2014-0143

[14] A. Shah and J. Patel, "Impact of financial behaviour and financial attitude on level of financial literacy amongst youth: An SEM approach," *Ilkogretim Online-Elementary Education Online,* vol. 19, no. 4, pp. 8024-8036, 2020.

[15] M. Ameliawati and R. Setiyani, "The influence of financial attitude, financial socialization, and financial experience to financial management behavior with financial literacy as the mediation variable," *KnE Social Sciences,* vol. 3, no. 10, pp. 811–832, 2018. https://doi.org/10.18502/kss.v3i10.3174

[16] Y. S. Lim and A. A. A. Jamal, "A study on financial product knowledge, attitudes and behaviours among malaysian young working adults," *Malaysian Journal of Social Sciences and Humanities,* vol. 8, no. 1, p. e002079, 2023. https://doi.org/10.47405/mjssh.v8i1.2079

[17] D. Nano, "The interrelationship between financial attitude, financial behavior and financial knowledge," *International Journal of Business and Technology,* vol. 4, no. 1, pp. 1-7, 2015. https://doi.org/10.33107/ubt-ic.2015.15

[18] Q. N. Shakila and S. M. Damayanti, "The interrelationship between financial knowledge, financial behavior, and financial attitude of undergraduate students in Padang, West Sumatra," *Asian Journal of Accounting and Finance,* vol. 4, no. 3, pp. 44-58, 2022.

[19] C.-C. Yong, S.-Y. Yew, and C.-K. Wee, "Financial knowledge, attitude and behaviour of young working adults in Malaysia," *Institutions and Economies*, vol. 10, no. 4, pp. 21-48, 2018.

[20] N. Tang, "Financial awareness and its role in financial behavior," *TIAA Institute Research Paper Series Forthcoming*, 2024. http://dx.doi.org/10.2139/ssrn.5018160

[21] J. Bhattacharjee and R. Singh, "Awareness about equity investment among retail investors: A kaleidoscopic view," *Qualitative Research in Financial Markets*, vol. 9, no. 4, pp. 310-324, 2017. https://doi.org/10.1108/Qrfm-04-2017-0036

[22] R. Hc and R. H. Gusaptono, "The impact of financial literacy on investment decisions between saving and credit: Studies on Sharia bank customers in the special region of Yogyakarta," *Journal of Economics and Business*, vol. 3, no. 4, 2020.

[23] W. Moko, A. Sudiro, and I. Kurniasari, "The effect of financial knowledge, financial attitude, and personality on financial management behavior," *International Journal of Research in Business & Social Science*, vol. 11, no. 9, pp. 184-192, 2022. https://doi.org/10.20525/ijrbs.v11i9.2210

[24] W. Feng *et al.*, "Community governance, financial awareness, and willingness to participate in national park development: Evidence from the giant panda national park," *Diversity*, vol. 14, no. 7, p. 582, 2022. https://doi.org/10.3390/d14070582

[25] R. Kumar, N. D. Pathak, and P. Kumar, "Role of accessibility, awareness and financial initiatives in financial inclusion: A demand-side analysis," *IUP Journal of Accounting Research & Audit Practices*, vol. 23, no. 4, pp. 251-270, 2024.

[26] J. Qiu, "Precautionary saving and health insurance: a portfolio choice perspective," *Frontiers of Economics in China*, vol. 11, no. 2, p. 232, 2016. https://doi.org/10.3868/s060-005-016-0015-0

[27] N. S. Mahdzan and S. M. P. Victorian, "The determinants of life insurance demand: A focus on saving motives and financial literacy," *Asian Social Science*, vol. 9, no. 5, pp. 274-284, 2013. http://dx.doi.org/10.5539/ass.v9n5p274

[28] H. Van Dung, P. D. Nguyen, and T. Gries, "Short-term precaution, insurance, and saving mechanisms in rural Vietnam," *Journal of Southeast Asian Economies*, vol. 3, no. 3, pp. 319-339, 2015.

[29] C. LUO, "Precautionary motivation and consumption insurance: Empirical analysis of household consumption behavior in rural China," *Frontiers of Economics in China*, vol. 2, no. 1, pp. 137-150, 2007. https://doi.org/10.1007/s11459-007-0007-z

[30] A. Hau, "Precautionary saving and mortality-contingent social insurance programs," *Public Finance Review*, vol. 29, no. 1, pp. 61-82, 2001. https://doi.org/10.1177/109114210102900104

[31] T. Lemma, Kenenisa, D. Tilahun Beyene, T. Mekoya Jemaneh, E. Melkamu Andualem, and G. Atomsa Hunde, "Patients' trust in health care providers among hospitalized patients, Jimma, South West Ethiopia," *SAGE Open Nursing*, vol. 9, p. 23779608231167810, 2023. https://doi.org/10.1177/23779608231167810

[32] L. Tam, E. Tyquin, A. Mehta, and I. Larkin, "Determinants of attitude and intention towards private health insurance: a comparison of insured and uninsured young adults in Australia," *BMC Health Services Research*, vol. 21, no. 1, p. 246, 2021. https://doi.org/10.1186/s12913-021-06249-y

[33] M. A. Hillen, H. C. De Haes, and E. M. Smets, "Cancer patients' trust in their physician—a review," *Psycho-oncology*, vol. 20, no. 3, pp. 227-241, 2011. https://doi.org/10.1002/pon.1745

[34] T. R. Lambregts and F. T. Schut, "Displaced, disliked and misunderstood: A systematic review of the reasons for low uptake of long-term care insurance and life annuities," *The Journal of the Economics of Ageing*, vol. 17, p. 100236, 2020. https://doi.org/10.1016/j.jeoa.2020.100236

[35] J. R. Brown, G. S. Goda, and K. McGarry, "Long-term care insurance demand limited by beliefs about needs, concerns about insurers, and care available from family," *Health Affairs*, vol. 31, no. 6, pp. 1294-1302, 2012. https://doi.org/10.1377/hlthaff.2011.1307

[36] R. Peng, W. Zhang, X. Deng, and B. Wu, "Public trust in the long-term care insurance pilot program in China: An analysis of mediating effects," *Frontiers in Public Health*, vol. 10, p. 928745, 2022. https://doi.org/10.3389/fpubh.2022.928745

[37] Y. Zhang and X. Yu, "Evaluation of long-term care insurance policy in Chinese pilot cities," *International Journal of Environmental Research and Public Health*, vol. 16, no. 20, p. 3826, 2019. https://doi.org/10.3390/ijerph16203826

[38] J. Costa-Font and M. Font, "Does 'early purchase'improve the willingness to pay for long-term care insurance?," *Applied Economics Letters*, vol. 16, no. 13, pp. 1301-1305, 2009. https://doi.org/10.1080/13504850701720171

[39] S. Dhodary, "Consumers' Attitudes and Purchase Intention of Life Insurance in Nepal," *Pravaha*, vol. 29, no. 1, pp. 70-78, 2023. https://doi.org/10.3126/pravaha.v29i1.71407

[40] B. T. Allaire, D. S. Brown, and J. M. Wiener, "Who wants long-term care insurance? A stated preference survey of attitudes, beliefs, and characteristics," *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, vol. 53, p. 0046958016663728, 2016. https://doi.org/10.1177/0046958016663728

[41] Z. Sun, Y. Li, and S. Gao, "Residents' Cognition, Attitudes, and Intentions to Participate in Long-Term Care Insurance: Moderating Effect of Policy Support," *Behavioral Sciences*, vol. 14, no. 10, p. 895, 2024. https://doi.org/10.3390/bs14100895

[42] D. Darwin and K. Gularso, "The influence of perceived benefits, financial literacy, and demographics on health insurance purchase intention by gen z which is mediated by attitude," *Return: Study of Management, Economic and Bussines*, vol. 3, no. 9, pp. 647-664, 2024. https://doi.org/10.57096/return.v3i9.276

[43] N. Susilowati and L. Latifah, "The mediating role of attitude toward money on students' financial literacy and financial behavior," *JABE (Journal of Accounting And Business Education)*, vol. 4, no. 2, pp. 58-68, 2020.

[44] I. OECD, *Measuring financial literacy: Core questionnaire in measuring financial literacy: Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy*. Paris: International Network on Financial Education (INFE), 2011.

[45] OECD, *Financial literacy and inclusion: Results of OECD/INFE survey across countries and by gender*. Paris: OECD Centre, 2013.

[46] J. K. Nga, L. H. Yong, and R. D. Sellappan, "A study of financial awareness among youths," *Young Consumers*, vol. 11, no. 4, pp. 277-290, 2010. https://doi.org/10.1108/17473611011093916

[47] P. Schneider, "Trust in micro-health insurance: an exploratory study in Rwanda," *Social science & medicine*, vol. 61, no. 7, pp. 1430-1438, 2005. https://doi.org/10.1016/j.socscimed.2004.11.074

[48] M. Wang, C. Liao, S. Yang, W. Zhao, M. Liu, and P. Shi, "Are people willing to buy natural disaster insurance in China? Risk awareness, insurance acceptance, and willingness to pay," *Risk Analysis: An International Journal*, vol. 32, no. 10, pp. 1717-1740, 2012. https://doi.org/10.1111/j.1539-6924.2012.01797.x

[49] J. F. Hair, J. J. Risher, M. Sarstedt, and C. M. Ringle, "When to use and how to report the results of PLS-SEM," *European Business Review,* vol. 31, no. 1, pp. 2-24, 2019. https://doi.org/10.1108/EBR-11-2018-0203

[50] A. E. Legate, J. F. Hair Jr, J. L. Chretien, and J. J. Risher, "PLS-SEM: Prediction-oriented solutions for HRD researchers," *Human Resource Development Quarterly,* vol. 34, no. 1, pp. 91-109, 2023. https://doi.org/10.1002/hrdq.21466

[51] J. F. Hair, G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, and S. Ray, *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook (Classroom Companion: Business)*. Cham, Switzerland: Springer Nature, 2021.

[52] J. F. Hair, G. T. M. Hult, C. M. Ringle, and M. Sarstedt, *A primer on partial least squares structural equation modeling (PLS-SEM)*, 3rd ed. Thousand Oaks, CA: Sage, 2022.

[53] A. Lusardi and O. S. Mitchell, "The economic importance of financial literacy: Theory and evidence," *American Economic Journal: Journal of Economic Literature,* vol. 52, no. 1, pp. 5-44, 2014. https://doi.org/10.1257/jel.52.1.5