The Journal of Behavioral Science
2025, Vol. 20, Issue 1, 89–101
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ISSN: 1906-4675 (Print), 2651-2246 (Online)

The Journal of Behavioral Science (TJBS)

Quantitative Research Article

The Role of Learning in Self-Management, Family Coping, and Financial Security among Muslim Families in Southern Thailand: A Structural Equation Modeling Analysis

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Abstract

Background/ problem: Rising household debt among young Thai Muslim families stems from multiple factors. To achieve financial stability, these families need to develop better learning and self-management skills.

Objective/ purpose: This study aimed to examine how learning influences self-management and family coping strategies, and how these factors impact household financial security among young Muslim families.

Design and Methodology: This study used structural equation modeling (SEM) to analyze data from 510 young families (couples with at least one child) in Yala Province, Southern Thailand, selected through multistage random sampling. The measurement tools used a 5-point rating scale with reliability coefficients between .66 and .94.

Results: The findings demonstrated that learning significantly influenced self-management ($\beta = .81$, $p < .001$) and family coping strategies ($\beta = .78$, $p < .001$), which in turn impacted household financial security ($\beta = .44$, $p < .001$). The structural equation model analysis revealed a strong model fit with the data: $\chi^2(96) = 183.02$, $p < .001$, $\chi^2/df = 1.91$, RMSEA = .04, CFI = .99, GFI = .97, AGFI = .92. The model explained 57% of the variance in learning ($R^2 = .57$), 90% in self-management and family coping ($R^2 = .90$), and 67% in household financial security ($R^2 = .67$).

Conclusion and Implications: This study recommends integrating culturally sensitive financial education into community programs, emphasizing Islamic values and transformative learning to enhance self-management, family coping, and financial security in Muslim families.

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Article Information

Received: 13.11.24
Revised: 24.12.24
Accepted for review: 26.12.24

Keywords

Transformative learning, behavioral strategies, family coping, financial literacy, young Muslim empowerment.

Household debt is a critical global economic challenge, influencing financial stability and quality of life (Costantini & Seccareccia, 2020). The household debt problem in Thailand remains a critical macroeconomic challenge, with debt-to-GDP ratios at persistently high levels (Limpaisan, 2017). Socioeconomic factors such as income inequality, financial literacy deficits, and essential expenditure patterns contribute significantly to this issue. While the Kasikorn Research Center (2024) notes a slight decline in household debt, overall levels remain alarmingly high, threatening household financial stability and macroeconomic health. Efforts by the government and private sector, including financial literacy programs, credit regulation, and initiatives like the debt clinic and informal debt elimination project (Chuenchoksan et al., 2019), have provided short-term relief. However, achieving sustainable financial resilience requires addressing root causes, particularly consumption patterns, which are key drivers of the crisis (Salignac et al., 2019). Rigorous analysis is essential for long-term solutions to address the root causes

of household debt, including income inequality, financial literacy deficits, and unsustainable consumption behaviors.

A comprehensive analysis of household debt requires examining factors influencing consumption behavior, divided into internal (self-regulation, financial competency, psychological balance) and external (macroeconomic conditions, sociocultural values, social support) variables (Tseng & Hsiao, 2022). Sustained behavioral change hinges on leveraging learning processes to enhance family financial decision-making. Transformative learning provides a robust framework for understanding how individuals and families critically reassess financial behaviors, fostering disciplined fiscal habits (Rasyad, 2015). This theory emphasizes experiential learning, cognitive reflection, and dialogue to develop cognitive frameworks and behavioral responses (Arlinghaus & Johnston, 2018; Kitchenham, 2008). This approach is especially relevant in addressing financial challenges because it encourages individuals and families (Taylor & Hill, 2016) to explore alternative methods of financial management, redefine their roles in financial decision-making, and adopt innovative, responsible financial behaviors.

The framework of transformative learning aligns closely with self-management and family coping, key components of household financial security. Self-management involves coordinating physiological, psychological, and social factors, empowering individuals to regulate behavior, make informed financial decisions, and avoid debt (Ryu & Fan, 2023). These skills also support collective family resource allocation, collaborative decision-making, and resilience during economic challenges (Kussudyarsana et al., 2024). Family coping establishes a stable environment for members' optimal development. Systems theory views families as adaptive systems, requiring resilience to maintain stability (McKenry & Price, 2005). Transformative learning, applied in financial education, fosters critical reflection on fiscal behaviors and promotes evidence-based decision-making. Research shows that parents' effective resource management skills influence family financial sustainability across generations (Kim & Chatterjee, 2019). Longitudinal studies, such as those conducted in the United States on programs like the "I Can Save" (ICS) initiative, reveal that reflective financial literacy interventions significantly enhance budgeting skills and reduce reliance on debt. These findings confirm the effectiveness of transformative learning in fostering sustainable financial behaviors in Western contexts (Sherraden et al., 2011). However, there is a lack of research exploring similar interventions within the cultural and religious framework of Thailand. Addressing this gap is crucial to develop tailored solutions that align with the unique values and socioeconomic conditions of Muslim families in the region.

This study examines how learning affects self-management and family coping strategies among young Muslim families in Yala province, Thailand, and their impact on household financial security. Located in Southern Thailand, Yala Province's predominantly Muslim population faces economic challenges including low income and limited financial resources, while distinct cultural practices influence family dynamics and financial behavior. Thai households, particularly young families aged 25–45, struggle with mounting debt while establishing households and raising children (Chantarat et al., 2020) Bank of Thailand data shows household debt reached 90.9% of GDP in Q3 of 2023, with young families accounting for 45% of new loans (Bank of Thailand, 2023). The study analyzes how learning influences self-management and family coping strategies within this unique cultural, religious, and economic context. The research develops targeted solutions for debt management and financial sustainability to strengthen economic resilience in Thailand.

Literature Review

This section outlines household financial security as a multidimensional concept encompassing income stability, savings, access to credit, and financial management (Lee & Kim, 2016). The discussion explores transformative learning theory's role in fostering critical reflection and perspective transformation, particularly in financial decision-making (Calleja, 2014). Building on McCubbin et al.'s work from the 1980s, the section examines self-management and family coping strategies as mechanisms for navigating financial stressors. These integrated concepts of learning, self-management, and family coping form the

theoretical foundation for understanding household financial resilience in the context of cultural and economic challenges.

Household Financial Security

Household financial security is the condition in which a family or individual has enough resources to meet basic needs, achieve financial goals, and withstand economic shocks without relying on unsustainable debt or depleting essential assets (Lee & Kim, 2016). This multi-faceted concept includes income stability, savings, access to credit, and effective financial management. Key components contributing to household financial security were selected based on their relevance to financial stability and resilience. These include making informed decisions (Navigate) and acquiring essential financial and job skills (Learn) to ensure stable income (Earn). Saving for emergencies and future goals (Save) is critical for creating a financial buffer that protects families from unforeseen economic shocks, enabling them to maintain stability during crises. Investment (Invest) refers to the process by which a family grows its assets, aiming to generate monetary profit. In the study context, investment is significant as it enables families to achieve long-term financial stability and economic mobility, which are critical for overcoming financial insecurity in resource-limited regions. Building and owning assets (Own) contributes to long-term stability by providing families with tangible resources that support financial independence. Safeguarding these assets through insurance and protections (Protect) is particularly important in the study context, where unforeseen events can disproportionately affect vulnerable populations, highlighting the need for resilience mechanisms. These actions require both individual and collective efforts within families and the broader social context (Prosperity Now, 2017).

Household financial security balances immediate needs with long-term financial goals through effective money management and financial literacy (Lee & Kim, 2016). Success depends on internal factors like financial discipline and goal setting, combined with external support from financial institutions and workplace policies (Prosperity Now, 2017). Government initiatives, including Thailand's "Debt Clinic" and "Learn Earn Own" programs, promote financial education and regulate lending practices (Chuenchoksan et al., 2019). Building financial security requires informed decisions, diverse income sources, emergency savings, asset ownership, and protection against financial risks (Sherraden et al., 2011).

Transformative Learning

Transformative learning theory provides a framework for understanding how individuals develop financial capabilities through critical reflection and perspective transformation (Calleja, 2014). This theory suggests that significant financial experiences trigger cognitive shifts, leading individuals to question and modify their financial behaviors (Taylor, 2017). When applied to household financial security, the theory explains how families balance immediate needs with long-term goals through financial literacy, discipline, and informed decision-making (Lee & Kim, 2016). Government initiatives like Thailand's "Debt Clinic" support this transformation through education and lending regulation (Chuenchoksan et al., 2019), while success depends on both internal factors and external support systems (Prosperity Now, 2017).

This reflective process often results in perspective transformation, where a shift occurs in how individuals see themselves and the world, adopting new, more inclusive ways of thinking (Kitchenham, 2008). The final stage in this process is action and change, where individuals implement these new perspectives in their lives, leading to personal growth, social change, or professional development (Taylor, 2017). In the context of financial security, transformative learning equips individuals with the ability to critically evaluate their financial habits, adapt to economic challenges, and foster resilience through improved self-management and family coping strategies (Boström et al., 2018). Key components of transformative learning include experience, disorienting dilemmas, critical reflection, perspective transformation, and action (Taylor, 2017). Several factors influence this learning process, including cognitive dissonance, the social and cultural context in which learning occurs, supportive relationships that facilitate reflection, emotional resilience to cope with the discomfort of change, and an individual's readiness for change (Boström et al., 2018).

Self-management and Family Coping

The theoretical constructs of self-management and family coping, initially conceptualized by McCubbin et al. in the 1980s, constitute foundational paradigms for understanding the mechanisms through which individuals and family systems navigate psychosocial stressors and adapt to environmental perturbations. Self-management encompasses an individual's metacognitive capacity to regulate behavioral manifestations, emotional states, and cognitive processes in response to both endogenous and exogenous demands. This concept emphasizes continuous adaptation, with management seen as both an activity and an outcome, as described by Carpenter (1992). Kanfer and Gaelick-Buys (1991) described self-management as the coordination of the body, mind, and social interactions, emphasizing that individuals are ultimately responsible for their behavior changes.

Family coping involves collective efforts to maintain balance and unity within the family system, supporting each member's development. Price and Price (2010) noted that effective family coping promotes harmony and functionality. McCubbin et al. (1980) identified four key functions: reducing family stress risks, strengthening family resilience, managing stressors, and adapting to external challenges. This study consolidates these processes into broader variables, focusing on emotional resilience, cognitive flexibility, communication, social support, workplace support, and financial stability. These factors demonstrate the connection between personal agencies and external support systems, making them crucial for understanding self-management and family coping. By treating these as integrated variables rather than separate internal or external factors, the model better analyzes their impact on household financial security.

Research Hypotheses

This research investigates the role of learning, self-management, and family coping strategies in shaping household financial security among young Muslim families in Yala Province. The study proposes five hypotheses:

H1: External factors influence individual factors, learning, self-management, and family coping.
H2: Individual factors influence learning, self-management, and family coping.
H3: Learning influences self-management and family coping.
H4: Self-management and family coping influence household financial security.
H5: Learning influences household financial security.

Methods

Research Design

This study uses structural equation modeling (SEM) to analyze relationships between variables including learning behaviors, self-management, family coping, and financial indicators. The quantitative approach allows statistical analysis of how these factors interconnect.

Sample

The study sample comprises 510 contemporary nuclear families residing in Yala province, each consisting of a married couple and at least one child. These families were drawn from the population of new-generation families who have been married for no more than 10 years, as recorded in the database of the Ministry of Social Development and Human Security (2021), totaling 17,652 families registered between 2011 and 2020. The determination of sample size adheres to the methodological requirements of structural equation modeling (SEM) utilizing maximum likelihood estimation, which necessitates a minimum threshold of 400 observational units (Hair et al., 2006). In accordance with these methodological parameters and the need for robust statistical analysis, the selected sample size of 510 exceeds the prescribed minimum. Participant selection was conducted through a multistage random sampling protocol to ensure the representativeness of this population.

Instruments

The research utilized questionnaires to assess participants' knowledge and experiences regarding financial security, self-management, and family coping strategies. Since the questionnaire required translation from English to Thai, bilingual experts validated both versions to ensure semantic and syntactic consistency. This process ensured the Thai version accurately reflected the original English version's meaning (Sperber, 2004). The questionnaire comprised several scales. For learning, a 5-level rating scale was used, ranging from "most true" to "most untrue." Participants were asked about their financial knowledge, attitudes toward financial management, and learning experiences. Measuring self-management, items focused on emotional regulation, problem-solving, and behavioral adjustment strategies. Family coping strategies were assessed with items related to communication, emotional support, and collaborative problem-solving. Lastly, household financial security was evaluated through indicators like savings, debt management, and financial resilience. Each scale underwent validation through pilot testing with a sample similar to the main population. The item content validity index (I-CVI) for all scales ranged between .67 and 1.00, indicating high validity. Reliability testing showed Cronbach's alpha scores exceeding .70 for all measures, confirming internal consistency. Additionally, confirmatory factor analysis (CFA) was conducted to verify the structural validity of each scale, with component weights ranging between .46 and .96. These rigorous validation steps ensured the instrument's reliability and appropriateness for assessing the targeted constructs.

Data Analysis

The data analysis consisted of two major components. For basic data analysis, descriptive statistics (frequency and percentage) described the sample characteristics, along with mean, standard deviation, skewness, kurtosis, and minimum/maximum values of observed variables used in model development. These statistics assessed variable distributions and identified relationships among variables, providing initial understanding of their interrelationships before addressing research questions. The causal structure analysis examined causal relationships among variables, testing direct, indirect, and total effects through linear structural equation modeling. This analysis estimated and evaluated the model by examining influence patterns and determining relationship strength and direction between variables.

Results

Sample Characteristics

The preliminary data analysis of the sample group, consisting of 510 individuals, revealed that the majority were female, accounting for 379 participants (74.30 percent). Most participants were between the ages of 31–35, representing 169 individuals (33.10 percent). Regarding the duration of marriage, the largest group had been married for 3–4 years, comprising 146 participants (28.60 percent). The majority of participants had two children, with 190 individuals (37.30 percent). In terms of education, the highest level attained by most participants was a bachelor's degree or equivalent, with 312 individuals (61.20 percent). Additionally, most of the participants reported a monthly income between approximately $275–550 USD, with 209 individuals (41 percent).

Basic Data Analysis of Variables and Correlation Coefficients Between Variables

From Table 1, it can be seen that the average scores of the observed variables ranged between 3.33 and 4.27. Regarding data distribution, the standard deviation of the studied variables ranged from .52 to .83. An examination of the skewness of the observed variables revealed that all variables had skewness values between -2.03 and -.16. Similarly, the kurtosis values of the observed variables ranged from -2.89 to -.24. Normality testing revealed that most variables showed normal distribution ($p > .05$), except for variables measuring extravagant spending and adjustment ($p < .05$). The predominantly normal distribution of variables supports their suitability for structural equation modeling analysis.

Table 1

Statistical Measures used to Assess Whether an Observed Variable Follows a Normal Distribution

Observed Variables	Mean	SD	Skewness	Kurtosis	Min	Max	*p*-value
Household Financial Stability							
Income (ECO1)	3.66	.71	-.61	-.83	1.51	5.06	.59
Savings (ECO2)	3.85	.71	-.87	-1.59	1.54	5.10	.19
Protection (ECO3)	3.33	.76	-.16	-.24	1.15	5.29	.96
Navigation/Decision Making (ECO4)	3.82	.73	-.52	-.84	1.64	5.28	.62
Ownership (ECO5)	3.68	.83	-1.04	-.87	1.26	5.18	.40
Learning (ECO6)	3.65	.78	-.69	-.57	1.54	5.21	.67
Self-management and Family coping							
Problem Solving (COP1)	3.96	.52	-.26	-.46	2.43	5.12	.87
Knowledge (COP2) and Understanding Restructuring	4.01	.58	-.39	-.58	2.28	5.23	.78
Social Support (COP3)	4.09	.57	-.83	-1.60	2.51	5.11	.20
Emotional Expression (COP4)	4.01	.58	-.71	-1.00	2.39	5.10	.47
Learning							
Learning Content (LRN1)	3.76	.61	-.37	-.94	2.00	5.01	.60
Learning Process (LRN2)	3.82	.64	-.80	-1.00	1.97	4.99	.44
Reason for Learning (LRN3)	3.95	.56	-.59	-1.05	2.26	5.02	.49
Internal Factors							
Non-extravagant Spending (INN1)	4.13	.66	-2.03	-2.89	2.36	5.06	.002*
Self-reliance and Self-awareness (INN2)	4.01	.52	-.25	-.34	2.36	5.22	.92
Lifelong Learning and Trial-and-Error (INN3)	4.03	.64	-1.34	-1.82	1.93	5.03	.08
Adaptation (INN4)	4.27	.60	-1.84	-2.61	2.44	5.15	.006*
Religious Belief (INN5)	4.11	.61	-1.37	-2.03	2.14	5.07	.05
External Factors							
Family Support (SOC1)	3.91	.74	-.93	-1.40	1.83	5.23	.24
Family Influence (SOC2)	4.08	.58	-.81	-1.42	2.33	5.13	.26
Workplace Support (SOC3)	3.80	.58	-.29	-.55	1.93	5.03	.82

Note. $p < .05$

The researcher assessed the relationship between the variables by calculating the Pearson product-moment correlation coefficient to ensure that the observed variables were not highly correlated, which could lead to multicollinearity issues. The analysis revealed that the Pearson is correlation coefficients for the observed variables in this study did not exceed .85 cut off limit (Kline, 2011), indicating that multicollinearity was not a concern. This suggests that the data are suitable for linear structural equation modeling, as shown in Table 2.

Table 2

The Correlation Coefficient between the Studied Variables

Variable	ECO1	ECO2	ECO3	ECO4	ECO5	ECO6	COP1	COP2	COP3	COP4	LRN1	LRN2	LRN3	INN1	INN2	INN3	INN4	INN5	SOC1	SOC2	SOC3
ECO1	1.000																				
ECO2	.522**	1.000																			
ECO3	.475**	.443**	1.000																		
ECO4	.464**	.590**	.428**	1.000																	
ECO5	.398**	.414**	.436**	.624**	1.000																
ECO6	.466**	.488**	.440**	.685**	.632**	1.000															
COP1	.426**	.427**	.266**	.487**	.276**	.363**	1.000														
COP2	.405**	.385**	.208**	.423**	.283**	.421**	.663**	1.000													
COP3	.375**	.399**	.088*	.437**	.306**	.396**	.629**	.714**	1.000												
COP4	.408**	.374**	.198**	.409**	.277**	.358**	.582**	.580**	.713**	1.000											
LRN1	.305**	.208**	.254**	.250**	.180**	.331**	.417**	.239**	.248**	.278**	1.000										
LRN2	.273**	.243**	.176**	.304**	.126**	.345**	.430**	.255**	.276**	.305**	.759**	1.000									
LRN3	.298**	.219**	.104*	.280**	.096*	.322**	.452**	.304**	.338**	.333**	.677**	.820**	1.000								
INN1	.129**	.106*	.125**	.178**	.061	.130**	.260**	.174**	.174**	.163**	.166**	.194**	.189**	1.000							
INN2	.229**	.210**	.252**	.268**	.194**	.160**	.417**	.243**	.237**	.240**	.258**	.210**	.221**	.516**	1.000						
INN3	.255**	.216**	.174**	.317**	.184**	.269**	.415**	.370**	.378**	.326**	.252**	.228**	.275**	.314**	.573**	1.000					
INN4	.191**	.253**	-.020	.299**	.198**	.178**	.375**	.349**	.451**	.312**	.164**	.216**	.259**	.164**	.377**	.475**	1.000				
INN5	.198**	.210**	.074	.274**	.098*	.146**	.352**	.359**	.283**	.203**	.169**	.213**	.278**	.247**	.214**	.226**	.256**	1.000			
SOC1	.274**	.297**	.171**	.193**	.161**	.236**	.272**	.324**	.261**	.215**	.296**	.282**	.269**	.088*	.100*	.151**	.197**	.329**	1.000		
SOC2	.304**	.385**	.124**	.351**	.208**	.288**	.391**	.372**	.395**	.338**	.216**	.255**	.322**	.200**	.190**	.249**	.328**	.469**	.608**	1.000	
SOC3	.153**	.256**	.178**	.194**	.190**	.223**	.283**	.289**	.255**	.237**	.268**	.296**	.316**	.128**	.196**	.273**	.260**	.317**	.533**	.500**	1.000

Note. *$p < .05$; ** $p < .01$

Structural Equation Model Analysis

Initial structural model analysis indicated poor fit with empirical data (χ^2 = 2075.44, *df* = 184, *p* = .000, χ^2/df = 11.28, RMSEA = .14, CFI = .85, GFI = .72, AGFI = .65). Model modification, including correlation of error terms, was attempted but failed to converge. Subsequently, three non-significant paths were removed (learning → household financial security, external factors → learning, external factors → self-management and family coping), and one path was added (external factors → household financial security). The revised model demonstrated good fit (χ^2 = 183.02, *df* = 96, *p* = .000, χ^2/df = 1.91, RMSEA = .04, CFI = .99, GFI = .97, AGFI = .92) as shown in Table 3.

Table 3

The Analysis of the Structural Relationship Model

Index	Criteria	Initial	Adjusted
χ^2/df	Less than 5.00	11.28	1.91
RMSEA	< .08	.14	.04
CFI	> .90	.85	.99
GFI	> .90	.72	.97
AGFI	> .90	.65	.92
	Conclusion	Poor fit	Goodness of fit

When evaluating the fit index values against the criteria indicating model consistency with the empirical data, it was found that learning significantly shapes self-management abilities and family coping strategies, which in turn influences household financial security among young Muslim families. The influence size within the model is deemed acceptable, supporting the hypothesis. The analysis results are presented in Table 4 and Figure 1.

Table 4

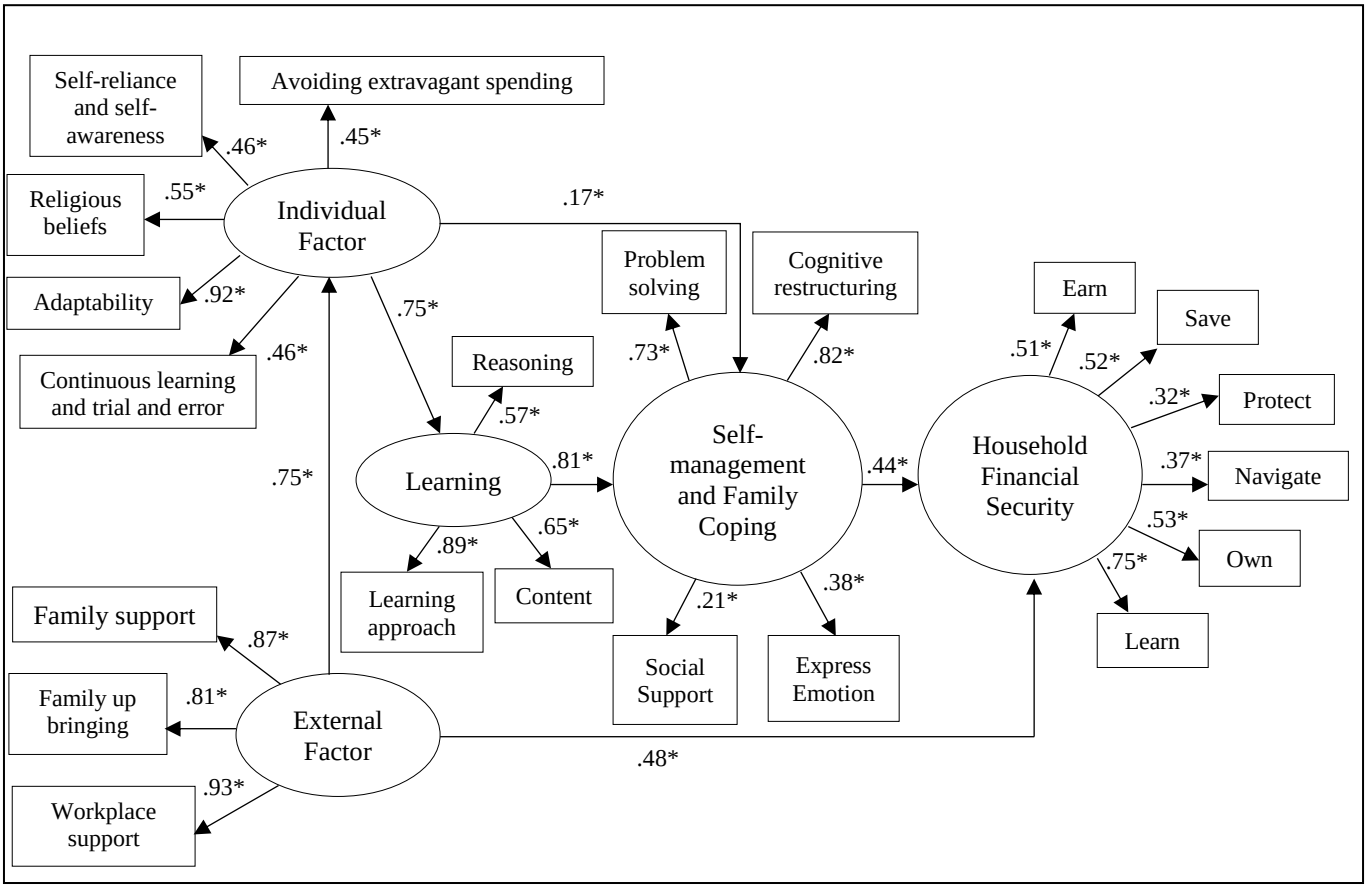
Direct Effect, Indirect Effect, and Total Effect

Causal Variable	Effect	Dependent variable			
		Individual factors	Learning	Self-management and family coping	Household financial security
External Factor	DE	.75*	-	-	.48*
	IE	-	.56*	.59*	.26*
	TE	.75*	.56*	.59*	.74*
Individual factors	DE	-	.75*	.17*	-
	IE	-	-	.61*	.34*
	TE	-	.75*	.78*	.34*
Learning	DE	-	-	.81*	-
	IE	-	-	-	.36*
	TE	-	-	.81*	.36*
Self-management and family coping	DE	-	-	-	.44*
	IE	-	-	-	-
	TE	-	-	-	.44*
R^2		.57	.57	.90	.67

Note. * $p < .05$; TE = Total Effect; DE = Direct Effect; IE = Indirect Effect.

Figure 1

Results of the Analysis of the Causal Structural Relationship Pattern of Household Financial Security



Note. * $p < .05$.

From Table 4 and Figure 1, it can be seen that learning has a substantial impact on how families manage themselves and cope with challenges, ultimately affecting their financial security. The model aligns well with the empirical data ($\chi^2 = 183.02$, $df = 96$, $p = .000$, $\chi^2/df = 1.91$, RMSEA = .04, CFI = .99, GFI = .97, and AGFI = .92). The analysis of the influence of causal variables on the financial security of new-generation families revealed the following direct effects:

1. External factors have a statistically significant direct influence on individual factors and household financial security, with influence coefficients of .75 and .48, respectively, at the .05 significance level.
2. individual factors directly influence learning, self-management, and family coping, with statistically significant influence coefficients of .75 and .17, respectively, at the .05 level.
3. Learning variables directly influence self-management and family coping, with a statistically significant influence coefficient of .81 at the .05 level.
4. Self-management and family coping variables directly influence household financial security, with a statistically significant influence coefficient of .44 at the .05 level.

Additionally, the following indirect effects were identified:

1. External factors indirectly influence learning through individual factors, with a coefficient of .57, statistically significant at the .05 level.
2. External factors indirectly influence self-management and family coping through individual factors and learning, with a statistically significant coefficient of .59 at the .05 level.
3. External factors indirectly influence household financial security through individual factors, learning, and self-management and family coping, with a statistically significant coefficient of .26 at the .05 level.
4. Individual factors indirectly influence self-management and family coping through learning, with a statistically significant coefficient of .61 at the .05 level.

5. Individual factors indirectly influence household financial security through learning and self-management and family coping, with a statistically significant coefficient of .34 at the .05 level.

6. The learning variable indirectly influences household financial security through self-management and family coping, with a statistically significant coefficient of .36 at the .05 level.

The causal relationship model of these factors explains the variance in individual factors, learning, self-management and family coping, and household financial security by 57%, 57%, 90%, and 67%, respectively.

Discussion and Conclusion

Discussion of Main Results

This study found that learning significantly influenced self-management and family coping strategies, which together impacted household financial security. Learning had a strong direct effect on self-management and family coping strategies ($\beta = .81$, $p < .001$). Self-management and family coping strategies, in turn, directly influenced household financial security ($\beta = .44$, $p < .001$ and $\beta = .59$, $p < .001$, respectively). Furthermore, learning indirectly influenced household financial security through its effects on self-management and family coping strategies ($\beta = .36$, $p < .001$). Learning does not significantly impact household financial security, suggesting that other factors, such as economic conditions, access to opportunities, and cultural influences, play a more crucial role (Taylor, 2017). These findings align with the hypotheses and validate the role of transformative learning as a framework for understanding financial behavior and resilience. The results demonstrate that transformative learning fosters critical reflection and adaptive behaviours, enabling individuals and families to reassess financial strategies and adopt sustainable practices. For instance, families in Yala Province, influenced by cultural and socioeconomic constraints, utilized reflective processes to explore new financial knowledge and realign family roles. This emphasizing that transformative learning involves disorienting dilemmas that compel individuals to challenge deeply held assumptions and adopt new perspectives (Boström et al., 2018; Taylor, 2017).

Moreover, recent studies highlight the relevance of transformative learning in similar contexts. Leichenko et al. (2022), Brosch and Steg (2021) emphasize the role of emotional and cognitive shifts in fostering sustainable behavioral change. Taylor and Hill (2016) further underscore the importance of culturally sensitive interventions in marginalized populations, demonstrating that context-specific strategies enhance transformative learning outcomes. These studies support the findings that reflective practices embedded in financial education can lead to improved financial behavior and resilience.

The SEM results also provide robust evidence for the proposed model's validity. High goodness-of-fit indices ($\chi^2/df = 1.91$, RMSEA = .04, CFI = .99, GFI = .97, AGFI = .92) confirm the structural alignment between theoretical constructs and empirical data. These results align with recent research validating SEM as a method for exploring complex relationships in behavioral studies (Kline, 2023; Mertler et al., 2021). Additionally, household debt remains a critical issue globally, with governments implementing measures to mitigate its impact. Recent studies (Mian et al., 2017; Verner & Gyöngyösi, 2020) emphasize the effectiveness of structural interventions in reducing debt burdens and promoting financial inclusion. In Thailand, initiatives like the "Debt Clinic" have shown promise in addressing these challenges through structured repayment plans and financial counseling (Chuenchoksan et al., 2019). These systemic strategies, combined with individual-level interventions such as financial literacy programs, can enhance household financial security in vulnerable populations.

Results showed external factors significantly influenced both individual factors ($\beta = .75$, $p < .05$) and household economic security ($\beta = .48$, $p < .05$). Key external factors included workplace support (weight = .93), family support (weight = .87), and family values (weight = .81). In Muslim families, these support systems align with Islamic principles of trust (amanah) and collective responsibility in financial management (Alshater et al., 2021). The findings support transformative learning theory, where supportive environments facilitate both learning and application of financial management strategies (Taylor & Hill, 2016). This integration of workplace support, family values, and cultural principles creates an environment conducive to improved financial decision-making and household economic stability. Individual factors, in

turn, have a direct impact on learning, self-management, and family coping, with statistical significance at the .05 level. The influence coefficients for these factors are .75 and .17, respectively. The most important indicators of individual factors include adaptability, religious beliefs, continuous learning, trial and error, self-awareness, and frugality (with importance weights of .92, .55, .46, .46, and .45, respectively).

Individuals who demonstrate adaptability, adhere to religious beliefs, engage in continuous learning, embrace trial and error, rely on themselves, have self-awareness, and practice frugality are more likely to develop strong learning, self-management, and family coping skills. In the context of Muslim families, religious beliefs provide a moral foundation that informs financial decisions. Islam emphasizes the importance of earning an honest livelihood (halal rizq), avoiding wastefulness (israf), and practicing frugality (Madi-Sisman, 2017), all of which contribute to better financial management and economic stability. These values encourage families to approach financial challenges with resilience, adaptability, and a sense of collective purpose.

Islamic principles emphasize financial responsibility and continuous learning as essential duties for family providers (Hussin et al., 2024). Research shows that saving behaviors significantly impact family well-being. Teungfung and Choiejit (2015) found savings to be the primary factor influencing happiness among Bangkok residents, followed by health and living conditions. More recent studies confirm this relationship between Islamic financial principles, savings behavior, and family well-being across Southeast Asian Muslim communities (Kader, 2021). These findings align with Islamic teachings on financial stewardship and family responsibility, reflecting the study's emphasis on integrating cultural and religious values into transformative learning frameworks.

Learning has been shown to have a statistically significant direct influence on both self-management and family coping, with an influence coefficient of .81 (at the .05 significance level). The most important indicators of this relationship were the learning process, the reasons for learning, and the content of learning, with importance weights of .89, .65, and .57, respectively. These findings illustrate that Transformative Learning extends beyond individual learning to encompass family dynamics. When families collectively engage in learning, they can better manage finances and improve family coping strategies, thus contributing to economic stability. For Muslim families, this process aligns with the communal emphasis in Islam, where family members are encouraged to support one another in acquiring knowledge and applying it to achieve shared goals, including financial well-being. This aligns with the principles of adult learning, where practical application and shared experiences play a crucial role in transforming family financial behaviors (Merriam, 2018).

The study also revealed that Muslim families are aware of the burden of debt and are actively seeking ways to change their behavior and escape financial hardship. The key experience driving this change is placing themselves in new learning environments, particularly by following media trends and seeking both short- and long-term knowledge. Interaction with experienced individuals is crucial, as noted by Rodríguez Aboytes and Barth (2020), and Taylor and Hill (2016). Muslim families are aware of emerging thought processes and practices that differ from their past experiences (Kitchenham, 2008). Furthermore, the learning characteristics of Muslim families align with the principles of adult learning, which include self-directed learning, the accumulation of experience and knowledge, goal orientation, practical application, and respect for the learning process (Merriam, 2018).

The findings indicate that self-management and family coping directly influence household economic security through transformative learning processes (Calleja, 2014). As families adapt to changing social and economic conditions, those who actively update their knowledge and maintain flexible perspectives demonstrate greater financial resilience. This aligns with transformative learning theory, which emphasizes continuous adaptation through critical reflection and perspective transformation (Taylor, 2017). The ability to restructure financial understanding and develop problem-solving strategies proves essential for achieving sustained economic security in dynamic environments. Families that engage in transformative learning processes are more capable of developing innovative strategies for managing finances, reducing debt, and securing economic stability. Furthermore, having a clear debt repayment plan, long-term financial goals,

diversified investments, effective expense management, and emergency savings, alongside actions to eliminate problem-causing factors, significantly impacts household economic security.

Limitations

The study's findings validate the theoretical model but requires practical implementation. Future development should focus on creating an evidence-based manual or curriculum that enhances learning, self-management, and family coping skills to improve household economic security. This implementation should include project-based activities and undergo empirical testing to verify its effectiveness in real-world settings.

Implications for Behavioral Science

This study contributes substantially to the empirical literature regarding the significance of learning processes, self-management mechanisms, and family coping strategies in facilitating economic security among contemporary family units (McCubbin et al., 1980; Taylor, 2017; Taylor & Hill, 2016). These empirical findings provide a theoretical framework through which families may implement context-specific adaptations of these principles to enhance their economic stability. The research supported by empirical evidence and statistical validation and demonstrates how these elements interact to enhance economic stability. demonstrates the critical importance of family institutions implementing systematic approaches to early-stage financial education and development, encompassing domains such as fiscal management, consumption behavior optimization, and strategic planning. This framework necessitates the integration of multiple elements: familial support systems, cultivation of responsibility consciousness, application of religious principles in problem-solving methodologies, and commitment to continuous knowledge acquisition. The identification and emulation of successful financial paradigms within proximate social networks can serve as catalysts for behavioral modification. Immersion in such family environments facilitates the development of essential life management competencies conducive to financial security (Kader, 2021). Educational institutions across academic levels, in conjunction with family development organizations, can implement strategic interventions through policy formulation and programmatic initiatives that enhance financial literacy and economic awareness, aligning with the learning modalities and preferences of contemporary family units (Taylor, 2017).

Conclusion

This study underscores the importance of learning, self-management, and family coping strategies in achieving household financial security. External factors, such as family and workplace support, significantly influence individual adaptability and financial behaviors. Learning emerges as a critical mediator, fostering reflection, adaptability, and resilience, which are essential for effective financial management. These findings highlight the value of integrating culturally and religiously relevant financial education into community programs to support families in economically vulnerable regions.

Declarations

***Funding*:** This research (Grant No. RGNS 63-205) was supported by the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation, Thailand Sciences, Research and Innovation (TSRI) and Yala Rajabhat University.

Conflicts of Interest: The authors declare no conflicts of interest.

Ethical Approval Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Human Research Ethics Committee of Prince of Songkla University, Pattani Campus (protocol code PSU.PN.2-049/64, dated 30 June 2022) for studies involving humans.

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