ENHANCING RETIREMENT WELL-BEING THROUGH FINANCIAL PLANNING AND SELF-CONTROL: THE MEDIATING EFFECT OF FINANCIAL BEHAVIOR

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Abstract

Demographic transition into aging population in Sri Lanka has been more profound and it has posed formidable challenges, especially for policymakers. The impact of rapid increase in aging population on the economy is far-reaching; it puts upward pressure on public expenditure, posing significant challenges to fiscal sustainability. Addressing these issues requires a deep understanding of retirement well-being among employees. The previous studies have mostly explored the direct impact of financial behavior, financial planning, and self-control on retirement well-being; nevertheless, there is a dearth of studies that have explored the interconnection among these factors, and it remains relatively under-explored. This study aims at filling the said gap by investigating the mediating role of financial behavior on the relationship both the financial planning, self-control have with the retirement well-being among Sri Lankan employees. Based on the quantitative methodology the current study incorporates cross-sectional survey research design. The data gathered from 672 employees serving various industrial sectors is analyzed using the Partial Least Squares Structural Equation Model to test the hypothesized relationships. The findings indicate that financial planning and self-control have a significant positive impact on retirement well-being, both directly and indirectly through financial behavior. Financial planning and self-control improve the financial behavior of individuals and this in turn enhances their retirement well-being. The results also confirm that financial behavior partially mediates the relationship both the independent variables, namely financial planning and self-control have with retirement well-being. These results reveal the importance of promoting effective financial planning and self-control practices to improve retirement outcomes in addition to highlighting the critically significant role played by financial behavior in this. Comprehensive financial planning and strong self-control are pivotal in fostering better financial behavior, which consequently improves retirement well-being. This study provides empirical evidence from a developing country context and therefore makes a vital contribution to existing literature. These insights offer practical implications for policymakers and financial planners who seek to enhance the retirement well-being of employees, especially in developing countries.

Keywords: *Financial Behavior, Financial Planning, Retirement Well-being, Self-Control, Sri Lanka*

INTRODUCTION

Sri Lanka faces significant challenges due to its rapidly ageing population, leading to increased public expenditure and fiscal strains (Rodrigo, 2021; Wewala & Ediriweera, 2021). This situation highlights the critical need to investigate retirement well-being in the country. While researchers in other countries (Ghadwan et al., 2022; Hirvonen, 2018; Strömbäck et al., 2017) have explored how financial behavior, financial planning, and self-control directly impact retirement well-being, there is a gap in understanding their interconnected relationships. The Behavioral Life Cycle (BLC) theory (Shefrin and Thaler, 1988) and the Theory of Planned Behavior (TPB) (Ajzen, 1991) suggest that financial behavior may mediate the effects of financial planning and self-control on retirement well-being. However, the author was unable to locate a study that examined the direct effect of financial planning, self-control, and the mediating impact of financial behaviour on the relationship between financial planning and self-control on the retirement well-being of employees in Sri Lanka. Therefore, this study aims to fill these gaps in literature.

The rest of the paper is organized as follows. In the following section, the literature is reviewed, and hypotheses are developed. Following the analytical technique, the study's findings are given in the third section. A discussion of findings and conclusion are given in sections Five and Six, respectively.

LITERATURE REVIEW

According to the Behavioral life cycle (BLC) theory (Shefrin and Thaler, 1988) there is a link between self-control, financial behavior and the future well-being of people. Previous scholars used the Theory of planned behavior (TPB) (Ajzen, 1991) to predict early retirement, study behavioural intention to take a planning action and stated that this theory was successful in predicting individuals' savings behaviour toward retirement planning (Rameli and Marimuthu, 2018, as cited in Kumaraguru and Geetha, 2021). While pensioners in wealthy nations typically enjoy high levels of well-being, retirees in underdeveloped nations frequently have challenges in meeting their fundamental needs (Younas et al., 2019). According to Hirvonen (2018), behavioral issues that affect retirement well-being are among the main causes of these difficulties. In retirement planning, ideas like financial planning, financial behavior, and self-control are yet largely unexplored. Improving retirement well-being necessitates addressing these behavioral issues, particularly in developing nations like Sri Lanka.

The research gaps found in the earlier literature provide the foundation for the conceptual framework. The conceptual framework is visually shown in Figure 3.1.

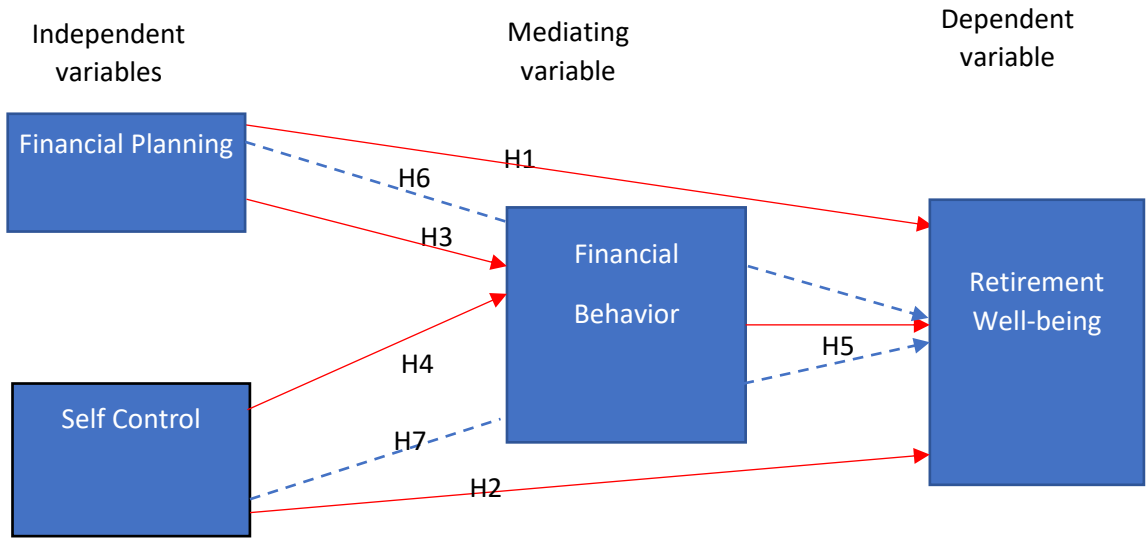

Figure 1: Conceptual framework

Financial Planning on Retirement Well-Being

Governments, like the one in Hong Kong, acknowledge this and support financial planning to improve the standard of living for senior citizens (Liu, Bai, and Knapp, 2021). In both established and emerging nations, retiree financial planning is crucial to guaranteeing financial security after retirement (Henkens, 2022; Scharn et al., 2018). Studies (Rooij et al., 2012; Bacova and Kostovicova, 2018; Setyawan & Wijaya, 2020; Michelson, Schwartz, and George, 2018; Noone et al., 2009) highlight the significance of long-term financial preparation for a

healthier retirement. As a result, a hypothesis has been developed to investigate the connection between retirement well-being and financial planning.

H_1: Financial planning has a significant impact on retirement well-being

Self-Control on Retirement Well-Being

Few studies, including Vuković and Pivac (2021) and Kim et al. (2016), have indicated a greater relationship between self-control and retirement well-being. Individuals with higher self-control tend to save more for retirement and manage retirement costs more effectively (Younas et al., 2019). These collective findings strongly support the idea that self-control significantly influences retirement well-being.

H_2: Self-control has a positive impact on retirement well-being

Financial Planning on Financial Behaviour

Purwidianti et al.'s study from 2022 highlights the important influence that responsible financial planning has on people's financial behavior. According to research, those who participate in financial planning tend to be more aware of bill payment schedules and retirement preparedness, which supports the idea that financial planning encourages good spending and saving habits. Moreover, additional research has demonstrated the significant beneficial impact of financial planning on financial behavior (Vuković & Pivac, 2021; Chua & Chin, 2022). In light of these discoveries, hypothesis three makes the following assertion.

H_3: Financial planning has a significant impact on financial behavior

Self-Control on Financial Behavior

Higher self-control leads to better financial conduct, less financial worry, increased future financial security, and more comfortable retirements, according to a Swedish study (Strömbäck et al., 2017). Poorer financial behavior is associated with a lack of self-control (Castro-González et al., 2020; Hirvonen, 2018). increased self-control leads to increased savings and more adherence to spending plans, which help people accumulate wealth for retirement (Hirvonen, 2018). Self-control, financial conduct, and saving practices are significantly positively correlated (Hirvonen, 2018; Sehrawat et al., 2021; Vuković & Pivac, 2021). Even if the relationship between financial behavior and self-control is acknowledged, retirement savings still need greater attention (Strömbäck et al., 2017). In general, exercising self-control improves one's financial conduct, resulting in improved budgeting, decreased excessive spending, and the avoidance of debt (Vuković & Pivac, 2021). Thus, the following is the test for hypothesis Four.

H_4: Self-control has a significant impact on financial behavior

Financial Behavior on Retirement Well-Being

Higher self-control leads to better financial conduct, less financial worry, increased future financial security, and more comfortable retirements, according to a Swedish study (Strömbäck et al., 2017). While systematic financial practices improve financial stability (Vuković & Pivac, 2021), poor habits such as insufficient savings reduce retirement wealth and well-being (Dwyer et al., 2018). Lower self-control is connected to inferior financial conduct (Castro-González et al., 2018). A prosperous retirement can be hampered by careless financial decisions (Lusardi & Mitchell, 2014). On the other hand, prudent financial practices increase retirement

confidence (Chua & Chin, 2022; Biljanovska & Palligkinis, 2018; Strömbäck et al., 2017). Thus, the following is how hypothesis Five is put forth:

H_5: Financial behavior has a significant impact on retirement well-being

Financial Behavior on Financial Planning, Self-control, and Retirement Well-Being

There is little research on how financial behavior influences the relationships between self-control, retirement well-being, and financial planning. Self-control affects financial well-being through financial behavior rather than retirement well-being, according to a Pakistani study (Younas et al., 2019). Other research has looked at the relationship between stress, financial literacy, and financial behavior (Rahman et al., 2021). There is a huge research vacuum on this subject in Sri Lanka. The Behavioral Life Cycle (BLC) theory developed by Shefrin and Thaler in 1988 emphasizes the importance of mental accounting, self-control, and framing in analyzing financial behavior. These insights can be utilized by financial planners to design programs that will assist people in managing their money and securing their financial future (Younas et al., 2019).

The Theory of Planned Behavior (TPB), developed by Ajzen (1991), predicts early retirement intentions by concentrating on attitudes, subjective norms, and perceived control. Studies employing BLC theory explain financial decisions like retirement planning (Achtziger et al., 2015). Additionally, prior research has demonstrated that optimistic outlooks enhance retirement planning (Zappalà et al., 2008, as cited in Kumaraguru and Geetha, 2021). Thus, the following hypothesis is used to evaluate the relationship between financial behavior, retirement well-being, and financial planning.

H_6: Through financial behavior, financial planning has a significant impact on retirement well-being

The BLC theory suggests that prioritizing future well-being leads individuals to save for retirement over current consumption. Mental accounting, which categorizes consumption choices and enhances self-control, is crucial for managing behavior. Behavioral interventions can use mental accounting to promote savings and retirement planning (Mahapatra, Raveendran, and Mishra, 2022). The BLC hypothesis states that resisting impulses and the costs of self-control influence financial behavior (Chua and Chin, 2022). Empirical findings indicate a positive correlation between self-control and financial behavior, supporting the BLC concept (Hirvonen, 2018). Thus, the BLC theory provides a valuable framework for understanding self-control, financial behavior, and retirement well-being. Accordingly, the following hypothesis is suggested.

H_7: Through financial behavior, self-control has a significant effect on retirement well-being.

METHODOLOGY

The research utilizes a quantitative, cross-sectional questionnaire design with a positivist, deductive methodology (Saunders, Lewis, and Thornhill, 2007). The data for statistical analysis was gathered using stratified sampling and a closed-ended questionnaire using a seven-point Likert scale (Ghadwan, Wan Ahmad, and Hanifa, 2022). A total of 672 legitimate responses (51.69% response rate) were obtained from the 1300 distributed questionnaires to represent all employees in Sri Lanka. From previously published literature, the dimensions and items for every variable were obtained. Financial security, psychological elements, and mental and physical health are all components of retirement well-being (Paschoal, Jacob Filho, and

Litvoc, 2007; Fan and Park, 2021). Retirement savings and financial planning skills are the key indicators of financial planning (Topa, Lunceford, and Boyatzis, 2018; Kiso and Hershey, 2017). Timely bill payments, record-keeping practices, retirement objectives, and budgeting were all aspects of financial behavior (Sugiyanto et al., 2019; Topa, Lunceford, and Boyatzis, 2018; Gutter and Copur, 2011). According to studies such as Strömbäck et al. (2017), Younas et al. (2019), Soepding, Munene, and Abaho (2021) and Handayani, Ainun, and Fahmi (2021), self-control includes emotional management, forward-thinking, and spending habits. Internal consistency of responses was assessed using Cronbach's alpha. The survey comprised six sections with a total of 39 questions designed to evaluate different aspects (Saunders, Lewis, and Thornhill, 2007). SPSS version 23 and SmartPLS version 4.0.9.6 were used to analyze the data (Collis and Hussey, 2014).

Compared to other regions, the Western Province of Sri Lanka contributed a higher percentage of survey responses due to its higher population density. Significant participation in the poll was observed from the public (35.6%) and semi-government (36.5%) sectors. Of the respondents, a significant percentage (40.2%) had a degree, and 28.7% had an advanced degree (MBA, MSc, MPhil, etc.). Ten percent had finished their A/L and O/L certifications. Over six years was the average length of employment for respondents (75.9%), with executive personnel constituting the largest group (59.1%). Furthermore, a sizable portion (87.9%) possessed professional credentials.

Assumptions such as homoscedasticity, normality, and linearity were evaluated before multivariate analysis (Mustafa et al., 2022). Discriminant validity, concept reliability, and outside loadings were all evaluated in the measurement model. Cronbach's alpha was used to measure reliability; values more than 0.7 were regarded as satisfactory (Hair et al., 2021; Sekaran & Bougie, 2016). Using thresholds of 0.7 and 0.5, respectively, for composite reliability and average variance extracted, convergent validity was assessed (Hair et al., 2021). Henseler et al. (2015) employed the HTMT ratio and the Fornell-Larcker criterion to verify discriminant validity. Multicollinearity, SRMR, R^2, f^2, and Q^2 were all considered in the structural model assessment. With VIF values less than 5, multicollinearity was deemed acceptable, and an excellent model fit was indicated by SRMR values less than 0.08 (Hu & Bentler, 1998). Greater model fit was indicated by higher R_2 values, and Hair et al. (2021) were used to classify f^2 and Q^2 effect sizes. Researchers subsequently performed investigations using structural equation modelling (SEM).

EMPIRICAL RESULTS

The Partial Least Squares (PLS) analysis was chosen due to its reliability under certain unmet assumptions. The study followed a method proposed by Gudergan et al. (2008) involving confirmatory tetrad analysis (CTA) aligned with PLS assumptions to assess the measurement model. Subsequently, Consistent PLS algorithm and bootstrapping were employed to evaluate both measurement and structural models.

Evaluation of the measurement model included examining outer loadings, construct reliability and validity, and discriminant validity. Path loadings ideally exceeded 0.70, with indicators falling below 0.7 cautiously removed to ensure reliability and validity metrics, following recommendations by Hair et al. (2021). The final model demonstrated acceptable outer loadings, with explained variance surpassing error variance, indicating indicator reliability. All variables exhibited outstanding reliability, with alpha values exceeding 0.80. Convergent

validity was confirmed, with Composite Reliability (CR) surpassing 0.7 and Average Variance Extracted (AVE) exceeding 0.5 and being less than its CR, ensuring satisfactory validity of variables (see Table 1).

Table 1. Outer loadings, Construct reliability, and Validity

Constructs	Items	Loadings	Cronbach's alpha	CR (rho_a)	CR (rho_c)	AVE
Financial Behavior	FB1	0.538	0.892	0.910	0.898	0.563
	FB2	0.71				
	FB3	0.875				
	FB4	0.794				
	FB5	0.878				
	FB6	0.692				
	FB7	0.709				
Financial Planning	FP1	0.77	0.898	0.907	0.900	0.645
	FP2	0.698				
	FP3	0.746				
	FP4	0.867				
	FP5	0.914				
Retirement Well-being	RW3	0.464	0.888	0.907	0.893	0.551
	RW4	0.649				
	RW5	0.697				
	RW6	0.808				
	RW7	0.822				
	RW8	0.839				
	RW9	0.835				
Self-Control	SC1	0.547	0.893	0.914	0.897	0.531
	SC2	0.598				
	SC3	0.842				
	SC4	0.814				
	SC5	0.837				
	SC6	0.855				
	SC7	0.749				
	SC8	0.479				

Source: Author compiled based on the survey data

Discriminant validity was assessed using the Fornell–Larcker criterion and the Heterotrait-Monotrait ratio of correlations (HTMT) matrix. Following the Fornell–Larcker criterion, the square root of the Average Variance Extracted (AVE) for each construct exceeded its correlation with other constructs. The HTMT matrix values were all below 0.85, affirming discriminant validity for all constructs, as shown in Table 2.

Table 2. Discriminant Validity

The Fornell–Larcker discriminant validity				
	FB	**FP**	**RWB**	**SC**
FB	0.750			
FP	0.735	0.803		
RWB	0.660	0.665	0.742	
SC	0.658	0.469	0.594	0.729
Heterotrait-Monotrait Ratio (HTMT)				
	FB	**FP**	**RWB**	**SC**
FB				
FP	0.742			
RWB	0.666	0.655		
SC	0.665	0.467	0.612	

Source: Author compiled based on the survey data

Table 3. Descriptive Statistics

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
RW	1.00	7.00	4.6952 (Moderate level)	1.27713
FP	1.00	7.00	3.8551 (Moderate level)	1.56794
FB	1.00	7.00	4.2485 (Moderate level)	1.36030
SC	1.00	7.00	5.4222 (Higher level)	1.06323

Source: Author compiled based on the survey data

In evaluating the Structural Model in PLS-SEM, several key metrics were considered. Multicollinearity, which ensures the reliability of the model, was confirmed to be absent, with all inner VIF scores falling below the accepted limit of 5. The SRMR for both the Saturated and Estimated Models was under 0.08, indicating a good fit. The R^2 values were 0.666 for Financial Behavior (FB) and 0.554 for Retirement Well-Being (RWB), showing substantial explanatory power. The f^2 values revealed that Self-Control (SC) and Financial Planning (FP) had a high impact on FB, while FP had a medium effect on RWB. High Q^2 values for both FB and RWB indicated strong predictive capabilities. Overall, the model demonstrated satisfactory reliability, fit, and predictive relevance for both FB and RWB.

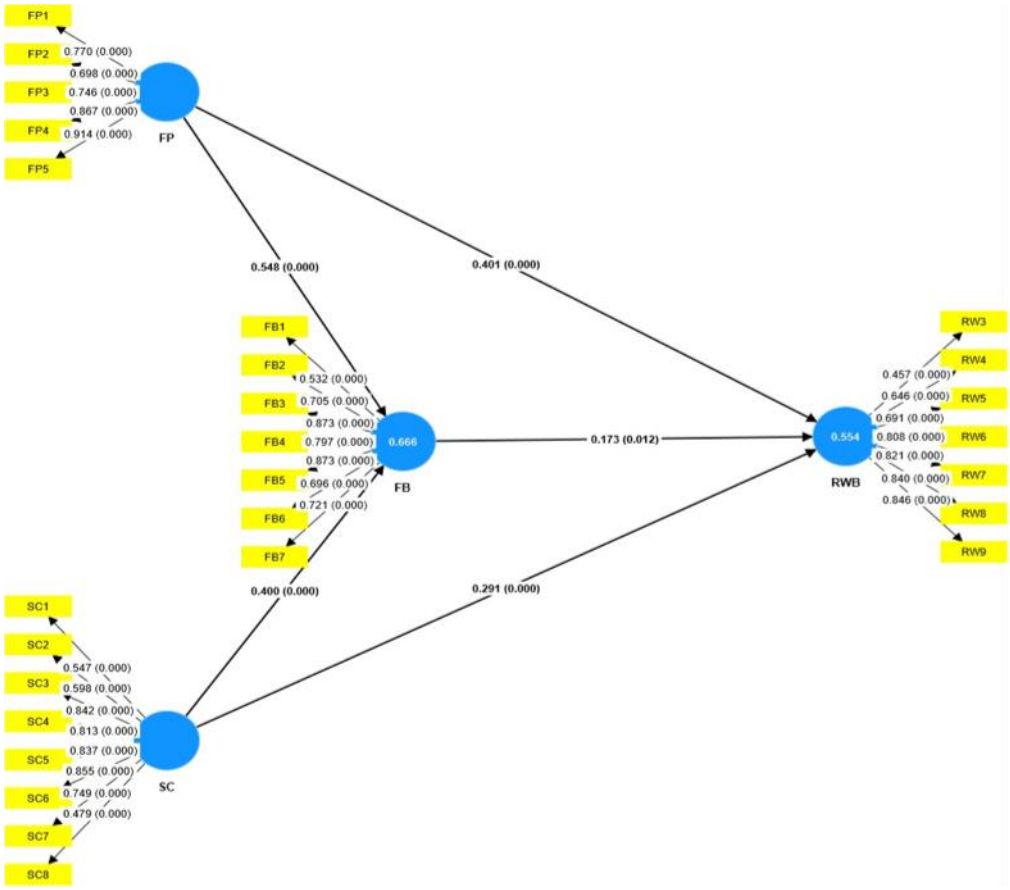

Figure 2: The Structural Model with Path coefficients and P value

According to the results, there were significant positive influences of Financial Planning (β = 0.401, t = 7.070, p < 0.05), Self-Control (β = 0.291, t = 5.571, p < 0.05), and Financial Behavior (β = 0.173, t = 2.503, p < 0.05) on Retirement Well-Being. Moreover, Financial Planning (β = 0.548, t = 15.547, p < 0.05) and Self-Control (β = 0.400, t = 10.444, p < 0.05) significantly positively influence Financial Behavior. As a result, hypotheses H1, H2, H3, H4,and H5 find support in the data.

There were positive significant indirect relationships between Financial Planning (FP) (β = 0.095, t = 2.464, p < 0.05) and Self-Control (SC) (β = 0.069, t = 2.394, p < 0.05) on Retirement Well-Being through Financial Behavior, thus supporting hypotheses H6 and H7. This indicates that both Financial Planning and Self-Control have not only direct impacts but also indirect effects on Retirement Well-Being mediated by Financial Behavior. Specifically, Financial Planning and Self-Control exhibit partial mediation through Financial Behavior in their relationships with Retirement Well-Being.

DISCUSSION

Retirement well-being and good financial behavior are greatly increased by financial planning and self-control. The objective of this study is to test the impact of financial planning and self-control on retirement well-being through financial behaviour. According to research by Smith and Johnson (2017) and Noone et al. (2009), people who plan their finances have better

retirement outcomes, such as increasing their wealth and having a more satisfying retirement (Lusardi and Mitchell, 2007). The association between financial planning and retirement well-being is positively correlated, however contextual factors may have an impact (Brown and Taylor, 2018).

For retirement to be successful, self-control is essential. Research conducted in 2020 by Castro-González et al. and in 2021 by Vuković and Pivac demonstrates a robust favourable association between self-control and retirement results. Self-control is correlated with prudent financial behavior, which helps ensure a comfortable retirement (Purwidianti et al. 2022; Hirvonen 2018; Younas et al. 2019; Strömbäck 2017). According to the Behavioral Lifecycle (BLC) theory (Biljanovska and Palligkinis, 2015, cited in Strömbäck et al., 2017; Vuković and Pivac, 2021) people with high self-control save more, handle financial difficulties better, and preserve financial security in retirement. Even though the relationship between financial behavior and self-control has gained more attention in the last ten years, there are still empirical gaps in this area (Strömbäck et al., 2017). It will need further research to fully understand the subtleties of this relationship and how it affects well-being and financial planning.

Align Chua and Chin (2022) indicate a significant positive association between financial behavior and retirement well-being, while Adam, Frimpong, and Boadu (2017) found no significant connection. The discrepancy may be due to differences in study populations. Thus, an insignificant relationship between financial behavior and retirement well-being, suggesting that factors beyond financial behavior alone may influence retirement well-being outcomes. This underscores the complexity of the relationship between financial behavior and retirement well-being, warranting further investigation into the multifaceted determinants of retirement well-being.

The study's findings suggest financial behavior partially mediates the relationship between financial planning, self-control, and retirement well-being. While most research focuses on direct associations, limited empirical investigation explores financial behavior's mediating effects. The TPB of Ajzen (1991) suggests that individuals with a positive outlook are more inclined to save for retirement and engage in financial planning, aligning with these results. Financial behavior is found to partially mediate the relationship between self-control and retirement well-being. Previous studies have also explored the mediating role of financial behavior, albeit not specifically on retirement well-being (Younas et al., 2019). In the Malaysian context, financial behavior is the most influential factor in retirement preparation, more so than financial planning or retirement income sources (Imran et al., 2021). Similar retirement income sources available to respondents in our study might contribute to the alignment of findings.

Although financial planning is recognized as important in Sri Lanka, there aren't many empirical studies on how it affects retirement well-being. Most studies conducted in Sri Lanka has concentrated on the difficulties pensioners experience in terms of financial literacy and retirement planning behavior (Heenkenda,2016; Alles et.al.2021; Prabashini, 2020; Rodrigo, 2021). By investigating the relationship between financial planning, self-control, financial behavior, and retirement well-being in the context of a developing nation like Sri Lanka, this study seeks to close the gap.

CONCLUSION

This study explores critical influences on retirement well-being, focusing on the mediating role of financial behavior. It finds that effective financial planning significantly enhances retirement well-being, surpassing the impact of self-control. Financial planning not only directly affects retirement outcomes but also improves financial behavior, which in turn reinforces retirement well-being. While financial behavior acts as a key mediator, its direct influence on retirement well-being is relatively modest. The study underscores the intertwined relationships among financial planning, self-control, financial behavior, and retirement well-being, advocating for comprehensive financial management strategies to secure retirement.

Implications of these findings span multiple sectors: for individuals, proactive financial planning and self-control are pivotal in bolstering retirement security; governments must address ageing populations' economic impacts through targeted policies promoting financial preparedness; policymakers can implement interventions fostering financial planning and self-control to enhance societal retirement outcomes. Educating employees early on retirement planning and integrating financial literacy into education curricula can instill responsible financial habits. Financial institutions and insurers can tailor products and services to encourage long-term savings and responsible spending habits, leveraging technological innovations for effective financial planning tools.

Future research should employ diverse sampling methods and expand across national contexts for comparative insights. Including additional behavioral and demographic variables, such as financial literacy and risk perception, could deepen understanding. Exploring psychological factors like emotional health as potential mediators could further elucidate the dynamics influencing retirement well-being.

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