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The Role Of Financial Behavior And Income Dynamics In The Relationship Between Financial Stress, Satisfaction, And Well-Being

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Abstract
Because of increased financial stress, income volatility and behavioral variations that influence economic and psychological outcomes, financial well-being is a burning concern. This paper investigates the influence of financial behaviour and income patterns on financial stress, satisfaction and well-being. The study is based on a cross-sectional survey of [insert sample population] and Partial Least Squares Structural Equation Modelling (PLS-SEM) in SmartPLS 4 to analyse the data. It is based on Theory of Planned Behaviour and financial capacity, a measurement model tested for reliability and validity, and structural model tested for direct and indirect effects/ moderating effects and a bootstrap for significance of the effects. Financial stress is inversely related to financial happiness and well-being (accounting for 44.36%) and to a lesser extent budgeting, saving, and appropriate credit utilization. Furthermore, stable income was related to reducing financial stress and enhancing financial performance, buffering the stress-satisfaction-well-being mediation pathway. With its own amalgamation of behavioral, psychological, and structural elements, this research serves to enable policy makers, educators, and organizations specializing in troubled economies to raise the level of financial competence, income stability, and well-being for the population.

Keywords: Financial well-being, Financial stress, Financial behavior, Financial satisfaction

1. Introduction
The quality of life is influenced by the financial strain, income inequality and behavioral factors, and scholars investigating the antecedents of personal financial wellbeing (PFWB) Financial Wellbeing is the sense that individuals have of their financial situation, that their finances are stable, in control, sufficient and will continue to be so, both now and in the future. Financial security and satisfaction have become important indicators of well-being because of the high financial uncertainty in the world. However, its potential mediating and moderating effects imply that behaviors and patterns of income that would be expected to lead to differences in pleasure and well-being between otherwise economically equal people, do occur (Shim et al., 2009; Gerrans, 2014).

Financial distress - anxiety about making ends meet, and managing with limited resources - has regularly been associated with reduced satisfaction, productivity, and mental health. These negative findings make it urgent to identify measures to alleviate financial stress. Financial satisfaction is a subjective indicator of finances. Experience of financial well-being lies in between objective measures of finances and subjective well-being outcomes, and it can mediate

the relationship between stressors and well-being outcomes (Joo & Grable, 2004; Xiao et al., 2009).
This neighborhood also requires an income structure. The latest evidence indicates a preference for income stream stability, orientation and predictability over income level as a defining factor of financial well-being (Fisher, 2010; Zagorsky, 2020). High income makes a person more financially stable and therefore happier whilst volatile income may cause financial stress even with high income. Thus, income dynamics are viewed increasingly as a structural condition and not only that but the long-term impact of this variable on financial outcomes is mediated by individual behavior (Lusardi and Mitchell, 2014).

Besides structural determinants, financial behavior (budgeting, saving, investment and the use of credit) has been demonstrated as having an influence on financial happiness and well-being (Xiao & Porto, 2017; Serido et al., 2010). A healthy financial behaviour helps in controlling your money, resist shocks and develop confidence in future and release stress from your head. Lack of money management skills - lack of money management skills leads to increased stress and dissatisfaction, thus creating a vicious cycle of unhealthy lifestyle choices Based on behavioural theories such as Theory of Planned Behaviour (Ajzen, 1991), financial attitudes and intentions contribute towards financial behaviour, which in turn influence financial outcomes. And according to this perspective, financial stress is minimized or maximized based on people's financial behavior.
As the financial behaviour is explained through the relationship between income trends and financial behaviour, we can find out through this paper that financial well-being is determined. In keeping with our second hypothesis, we find that households with volatile income and good financial management practices (i.e., savings buffers, expenditure planning) are less stressed and more financially satisfied than similarly income volatile households with poor financial practices. Financial literacy and behaviours help to moderate the impact of income shocks and stresses reinforcing the importance of capability building interventions in improving well-being (Lusardi & Tufano, 2015; Muir et al., 2017). This demonstrates that internalised behaviours and choices impact upon financial wellbeing as much as external economic factors.

Based on these findings, a multi-dimensional framework of financial well-being has been presented where income dynamics, transactional behavior, financial stress and satisfaction have an impact. Combining psychological, behavioural and structural perspectives helps researchers to describe individual financial outcomes and identify policy and practice leverage points. The implications of this research are important for financial education, workplace interventions and social policy in alleviating financial stress and enhancing well-being. This interaction is important to understand at times of economic uncertainty, increasing inequality, and retirement and health care systems that have increased use of individual financial responsibility.

2. Literature Review and Hypothesis Development

2.1. Financial Behavior and Personal financial well-being

Financial behavior is often thought to play an important role in financial well-being. Budgeting, saving, and appropriate utilization of credit, and long term planning ensures financial stability and subjective financial control (Xiao, Tang, & Shim, 2009). Positive Financial behaviors lead to

financial satisfaction and well-being according to consumer and financial literacy studies. Research evidence supports the behavioral determinants account of well-being as accounting for larger variance than objective measurements of income or wealth, demonstrating the behavioral pathway as a focal issue of importance to subjective outcomes.
Based on these discoveries, experts propose that having monetary well-being is primarily shaped by monetary behaviour more than monetary resources (Garg, Soni, & Ghosh, 2024; Kim, Park, & Richardson, 2024). Large scale consumer surveys show that people who regularly work to put extra money away for emergencies, and don't run into too much debt, have more PFWB. Thus, this study suggests that financial action predicts positively on personal financial well-being.
(H1): Financial behavior has a positive and significant impact on personal financial well-being.

2.2. Financial Stress and Personal financial well-being

Financial stress- the impression of pressure caused by the inability to meet financial obligations or maintain financial security- is one of the primary causes of poor personal financial well-being (PFWB) (Netemeyer, Warmath, Fernandes, & Lynch, 2018). High debt, income instability, and a lack of savings can lead to financial stress, which can impact people's sense of control and lifetime security (Dackehag et al., 2019). Financial stress has ill consequences on subjective financial well-being and life satisfaction, both in developed and emerging countries (Ryu, Fan, Ahn, & Hamm, 2022; Tsuchiya, Leung, Jones, & Caldwell, 2020). Financial stress is a chronic stressor that induces a feeling of anxiety, reduced financial satisfaction, and poor decision-making (Lazarus & Folkman, 1984; Li, Chen, & Zhao, 2023). The longitudinal studies used to control for income and education indicate that those suffering from chronic financial constraint suffer a loss in well-being (Netemeyer et al., 2018; Li et al., 2023). These results agree with the theoretical and empirical consensus that financial stress has a negative effect on PFWB.
(H2): Personal financial well-being is negatively and significantly affected by financial stress.

2.3. Financial behavior & financial satisfaction

Daily financial behaviours have great impacts on financial contentment, an individual's subjective evaluation of one's financial situation (Xiao & Porto, 2017). Budgeting, saving, paying off debts and long-term planning make people financially more secure and reduces uncertainty, which increases financial satisfaction. Even after taking income and wealth into account, positive financial behaviors are associated with more financial pleasure (Netemeyer, Warmath, Fernandes, & Lynch, 2018; Kim, Park, & Richardson, 2024). Financial happiness is also more often understood to mediate financial behavior and well-being (Xiao, Chen, & Chen, 2014). Responsible credit management, active saving, as well as financial planning make for more self-confident and accomplished consumers, according to cross-cultural and large-scale consumer studies. Additionally, positive financial behaviours create a boost in objective financial outcomes and subjective financial pleasure.
(H3): There was a positive and significant effect of financial behavior on financial satisfaction.

2.4. Financial stress and financial Behavior

Financial stress, that is, psychological stress because of perceived or actual financial challenges, is a predictive factor of financial decision-making (Sweet et al., 2013). High financial stress may adversely affect cognitive resources, self-control, and avoidance that can have a negative impact

on financial decision making and management (O'Neill et al., 2005; Sohn et al., 2012). Financial stress decreases savings and increases debt and encourages impulsive spending which threaten your long-term financial security (Gutter & Copur, 2011). Low-stress people are more likely to budget, and save, and manage their credit responsibly (Xiao & Porto, 2017). Positive behaviours increase financial confidence and resilience and make people feel financially better. Prior research suggests that financial stress may cause a cycle of maladaptive financial behaviour in which stressed people make short-term decisions that increase long-term financial vulnerability (Prawitz et al., 2006; Netemeyer, 2018). Based on behavioural finance and stress-coping theories, this is the relationship between financial stress and financial well-being from the perspective that this is both a psychological condition and a behavioural predictor of the financial well-being.
(H4): Financial stress has a negative and significant impact on financial satisfaction.

2.5. Financial satisfaction and Personal Financial well-being.

Financial satisfaction, which is the subjective judgment of the financial position of an individual is a significant factor of PFWB (Netemeyer, Warmath, Fernandes, & Lynch, 2018). Financially secure people report higher well-being, life satisfaction, have lower financial concern. Financial satisfaction is a significant psychological relationship between objective financial circumstances and subjective well-being because both cognitive and emotional reactions to perceived adequacy are involved (Brüggen, Hogreve, Holmlund, Kabadayi, & Löfgren, 2017). Financial contentment is positively linked to PFWB across diverse demographic parameters. Independent of income, both longitudinal and cross-sectional research indicate that greater financial contentment is a predictor of greater financial stability, reduction of stress and of life satisfaction (Li Chen and Zhao, 2023; Kim, Park, Richardson, 2024). These findings imply that happiness in terms of money directly enhances PFWB, and is the result of excellent financial conduct or little stress. Thus, financial satisfaction may lead to an improved financial well-being.
(H5): Financial satisfaction has a positive and significant impact on personal financial well-being.

2.6. Financial behavior as mediate role between financial stress and Personal Financial well-being.

Financial stress, which refers to the sense that one cannot satisfy financial demands and maintain economic security, regularly decreases personal financial well-being (PFWB) (Netemeyer, Warmath, Fernandes, & Lynch, 2018). Financial stress leads to less control, anxiety and decision-making that has a negative impact on the happiness of life and security for financially realizing life (Sweet, Nandi, Adam, & McDade, 2013). Behavioural processes may explain differences in the decline of PFWB by people under similar stress. Financial behaviour such as budgeting, saving, appropriate use of credit and/or long-term financial planning have an impact on how financial stress influences well-being (Xiao & Porto, 2017). Positive financial behaviours enhance financial management and resilience and maladaptive behaviours related to stress may contribute to exacerbating financial problems (Xiao, Tang, & Shim, 2009). According to the Theory of Planned Behaviour (Ajzen, 1991) and the stress coping frameworks (Lazarus & Folkman, 1984), a mediating relationship holds in financial behaviour with the stress-wellness path. Effective stress management increases financial happiness and PFWB with constructive financial behaviours. Financial behaviour is a significant predictor of well-being, independent of

objective financial resources, indicating the relevance of behavioural interventions in reducing financial stress (Netemeyer et al., 2018; Xiao & Porto, 2017). Based on these theoretical and empirical insights the following hypothesis is proposed:
(H6): Financial behavior mediate the relationship between financial stress and personal financial well being.

2.7. Financial behavior as mediating variable between financial satisfaction and Personal Financial well-being.

Personal financial well-being (PFWB) is affected by financial satisfaction, which is an individual's subjective measure of their financial standing (Netemeyer, Warmath, Fernandes, & Lynch, 2018). Those who feel that they have enough money to cover their requirements now and in the future, are happier, healthier and less concerned about money (Brüggen, Hogreve, Holmlund, Kabadayi, & Löfgren, 2017). Financial satisfaction links the objective financial resources and PFWB, by cognitive and emotional response to the perceived financial adequacy. Financial happiness enhances PFWB, although financial behaviours are often individual so how these pleasures are converted to well-being is often down to individual behaviour. Financial behavior (budgeting, saving, good credit management, and long-term financial planning) could mediate the financial satisfaction and PFWB. Financial satisfaction leads to a higher tendency of financial activities being proactive and responsible, which actually increase subjective well-being, controlling, and assurance. Above and beyond the financial pleasure, financial behaviour accounted for a significant percentage of PFWB variance (Netemeyer et al., 2018). Given all of these theoretical and empirical findings, the following hypothesis is proposed:
(H7): Financial behavior mediates the link between financial satisfaction and personal financial well-being.

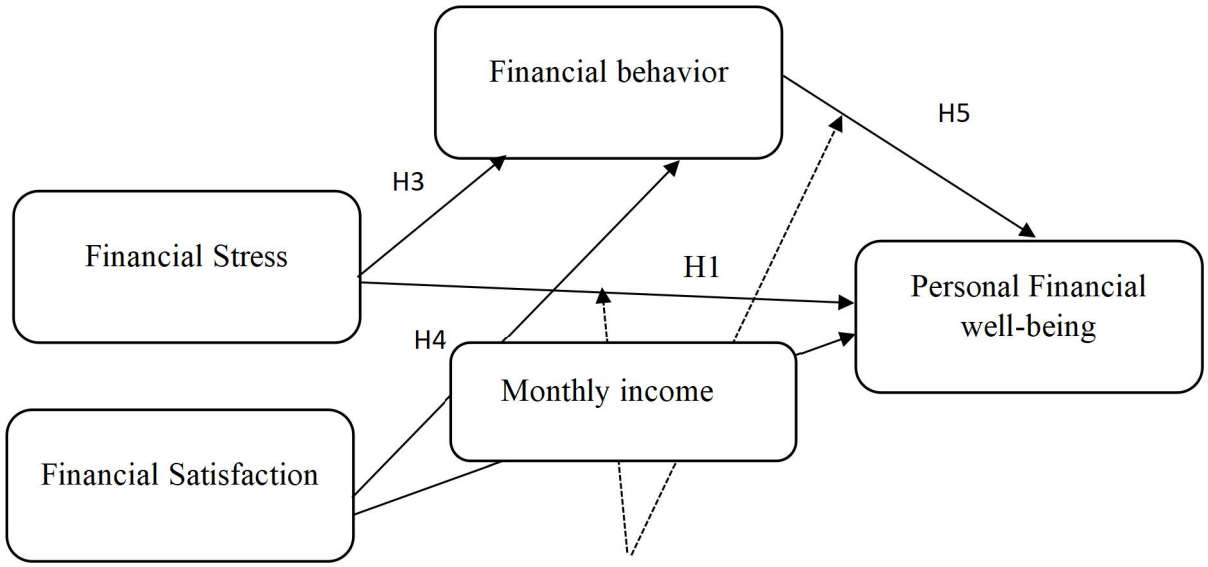
2.8. Monthly income as a Contingent Modifying Variable between Financial Stress and Personal Financial well being

Financial stress - the perception that one finds it difficult to meet financial obligations - has been found to have a negative effect on personal financial well-being (PFWB) in terms of reduced life satisfaction and control. Monthly income and other structural components may influence this negative impact severity. More or more stable monthly income may help PFWB cope with stress. However, financial stress and financial wellbeing can be exacerbated by irregular or poor income. Research shows, income both pays bills and defines financial stability and control (Lusardi & Mitchell, 2014; Fisher, 2010). Thus, monthly income may be moderating the financial stress-PFWB link. Financial stress and financial well-being could be less negative for people with higher income and negative for people with lower income. Based on this theoretical rationale and empirical evidence, the following hypothesis is put forward:
(H8): The monthly income moderates the association between financial stress and personal financial well-being, whereby the depressive impact of financial stress on PFWB is less pronounced for high monthly income earners.

2.9. Monthly income Mediating Role of Personal Financial well-being and Financial behavior.

Financial behaviour, such as budgeting, saving, use of appropriate credit and long-term financial planning is a well-developed predictor of PFWB. Financially proactive people are more in control, much less in uncertainty, and in better subjective well-being. The success of these behaviour(s) in improving PFWB may appear dependent on structural financial resources, notably monthly income. Higher or more consistent income is valuable in helping people to practice and maintain beneficial financial behaviours and improve financial well-being. Due to resource restrictions, healthy financial behaviours might not have an impact on PFWB for low and variable income persons. Income may be a moderator between the behavior - well-being relationship (Lusardi & Mitchell, 2014; Netemeyer, Warmath, Fernandes, & Lynch, 2018). Positive financial behaviours may have greater impacts on well-being among high-income people than they do among low-income people. This moderation places an emphasis on the role of behaviour and resources when it comes to the impact on finances. Based on this rationale, the following hypothesis is stated:
(H9): Monthly income moderates the relationship between financial behavior and personal financial well-being, so that the positive relationship between financial behavior and PFWB is stronger when the monthly income of the individuals is high.
For presentation purpose, the research model guiding this wok has been presented in Figure 1.

Figure 1. *Hypothesis model*



Source(s): Modification of (Fan and Henager, 2022)

3. Methodology

3.1 Measurement instrument

A structured questionnaire was used as an instrument primarily for obtaining data for this investigation. Most of the items on the self-administered questionnaire were closed ended. Twenty factors on a Likert scale were used to collect data to investigate the factors that influences the individual financial well-being in Kathmandu.

Five items taken from Joo and Grable (2004) were taken to evaluate financial behaviour, including the following statement, "I have save aside emergency funds." Cronbach's alpha of 0.897 the dependability of the construct was validated. Using 5 items from (Prawitz et al,2006) such as the example, 'I am satisfied with my current personal financial condition', Cronbach alpha recorded a score of 0.914 of financial satisfaction. Financial stress, which comprised five items, had an alpha of 0.899 with an example such as "I feel worried about the loans I have right now (Personal vehicle, housing etc.)." Likewise, as an attempt to evaluate financial wellbeing, five items were adapted from Cohen, et al. (2015), having a Cronbach's alpha of 0.932 with the statement, "I am becoming financially secure."

Table 1. *Study variables' measurement sources*

Construct	Source of measurement
Financial behavior (FB)	Joo and Grable, (2004)
Financial stress (FST)	Heckman, Lim & Montalto, (2014)
Financial satisfaction (FSF)	Prawitz et al, (2006)
Personal financial well-being (PFWB)	Cohen, et al. (2015)

Source(s): *Authors' own work*

Sample and data collection

Aiming to relate to financial stress and financial satisfaction, the study refers to financial behavior to assess the actual impact of these variables on the health of the subjects based on one moderating variable: monthly income of respondents. For this purpose all the men and women in Kathmandu who had any job, university students and others have been assigned a questionnaire, which contained some similar questions. Purposive non-probability sampling was used to select participants. The analysis of results was performed according to Godden's rule (2004), which allows only 384 valid replies for the final analysis after elimination of incomplete or invalid data regarding some significant variables. Subject responses were based on a five-point Likert scale. Of the legitimate responses, 46.9 per cent were males and 53.1 per cent were females.

$$N = \frac{Z^2 \times P \times (1-P)}{M^2}$$

Where:

SS= Sample Size for infinite population (more than 50,000) Z = Z value (e.g. 1.96 for 95% confidence level)

P = population proportion (expressed as decimal) (assumed to be 0.5 (50%) since this would provide the maximum sample size).

M = Margin of Error at 5% (0.05)

Now,

$$N = \frac{1.962 \times 0.5 \times 1-0.5)}{0.05^2}$$

N = 384.16 respondents

Table 2. *Background information*

Items		Frequency	Percent
Gender	Male	204	53.1
	Female	180	46.9
Age	20- 30 years	209	54.4
	30-50 years	143	37.2
	Above 50 years	32	8.3
Education	SEE	111	28.9
	Bachelors	162	42.2
	Masters	106	27.6
	Others	5	1.3
Marital status	Single	220	57.3
	Married	164	42.7
	Divorce		
Occupation	Government	346	90.1
	Non- government	16	4.2
	Private business	5	1.3
	Others	17	4.4
Monthly income	Below 25,000	38	9.9
	25,000- 50,000	141	36.7
	Above 50,000	205	53

Source(s): *Author's own work*

Table 2 represents demographic profile of the respondents encompassing different factors like Gender, Age, education qualification and monthly income etc. The demographic profile of the respondents has played a very significant role in understanding the individual characteristics of the respondents. Of 384 respondents, 53.1% were males while 46.9% were females, which indicates a fairly even distribution of genders. Age distribution showed the majority (54.4%) to be between 20-30 years of age, followed by 37.2% for 30-50 years and the remaining 8% above 51 years, which meant most of the participants were young professionals between their early to mid career stage. Regarding marital status, 57.3% were married, and 42.7% were single. With respect to education qualification, bachelor's degree (42.2%) dominated the group, followed by master's degree (27.6%), other qualification (1.3%) and school level of education (SEE) (28.9%). Based on the holding capacity, it was observed that the study sample included well-educated and predominantly young professionals in Kathmandu, which makes it feasible for reliable interpretations of perceptions and behavior-based results for the study. Similarly, with regards to occupation, most of the respondents are government (90.10%) whilst a very few number of entrepreneurs was recorded (1.30%), followed by non-government (4.20%) and lastly, other (4.40%).

Results and analysis

The research design adopted in this work is hypothetico-deductive involving the process which is easier for the researcher to come up with a tentative hypothesis which can be transited to mathematical models (Holden & Lynch, 2004; Ponterotto, 2005). The case study level of examination is highly suitable when dealing with social and economic problems that can be expressed as a number (Broadbent & Unerman, 2011; Holden & Lynch, 2004). Thus, the current study used the Likert scale to gather quantitative data related to the outcomes under study.

Analyses of the data with SmartPLS 4.1.1.4 software using Partial Least Squares Structural Equation Modelling (PLS-SEM) was used in order to test the hypotheses that were designed. Based on the two-step procedures proposed by Chin (1998), first, the measurement model was tested in order to examine the validity and reliability of the survey instrument under study. The structural model was then tested to examine the proposed hypotheses.

Since the conventional parametric inference approach does not apply in PLS-SEM, a bootstrapping resampling strategy was applied to estimate parameters of PLS-SEM (Wold, 1982). This method was adopted because it allows in-sample prediction, where some authors like Hair et al. (2014) have found to be very useful for such a study, as well as relaxes the multivariate normality assumption (Chin et al., 2003). The following criteria were used to test the outer measurement model and the inner structure model proposed by Hair et al. [2021] as displayed in Table 2.

Measurement model assessment

We used reliability, convergent validity, and discriminant validity to check the measurement model's appropriateness, as suggested by the literature. We used Cronbach's alpha, Composite Reliability (CR), and pa to check for reliability. According to Henseler et al. (2016), all constructions had values above the suggested threshold of 0.7 for these metrics, as seen in Table 3.

Table3. *Recommended threshold values for the outer and inner models*.

Inner measurement model				Outer model				
Criteria	SFL	α	CR	AVE	R^2	Q^2	SRMR	NFI
threshold value	>0.70	>0.60	>0.70	>0.50	> 0.10	>0.0	<0.08	>0.90

SFL: Standardized Factor Loading; a: Cronbach's alpha value; CR: Composite reliability; AVE: Average Variance Extracted; R2: Co-efficient to determination; Q2: Stone–GeisserQ2; SRMR: Standardized root means error; NFI: Normed Fit Index.

We used the Average Variance Extracted (AVE) to check for convergent validity. Hair et al. (2014) say that convergent validity is reached when the outer loadings of each piece are higher than 0.7 and the AVE of each concept is higher than 0.5. Table 2 shows that all item loadings are over 0.7 and all AVE values for each construct are over 0.5, which shows that there is enough convergent validity.

4. Data Analysis Results

4.1. *Evaluation of the outer measurement model*

To find out how reliable and valid the outer model was, we looked at composite reliability (CR), internal consistency reliability (Cronbach's alpha), convergent validity, and discriminant validity. The Cronbach's alpha values in Table 4 were between 0.897 and 0.932, which suggests that the scale was quite trustworthy on the inside. The results of the evaluation of the measuring model for the four key constructs—financial behavior (FB), financial satisfaction (FSF), financial stress (FST), and personal financial well-being (PFW)—are shown in Table 4. The research looks at diagnostics for multicollinearity, convergent validity, internal consistency reliability, and factor loadings.

Table 4: *Factor loadings, Constructs validity and VIF*

Constructs	Items	FL	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	VIF
FB	FB1	0.795	0.897	0.905	0.923	0.707	2.518
	FB2	0.874					3.06
	FB4	0.857					4.433
	FB4	0.884					2.976
	FB5	0.79					3.204
FSF	FSF1	0.83	0.899	0.906	0.925	0.71	3.137
	FSF2	0.852					2.621
	FSF3	0.838					2.852
	FSF4	0.818					4.382
	FSF5	0.875					4.287
FST	FST1	0.876	0.938	0.942	0.953	0.802	3.415
	FST2	0.872					3.042
	FST3	0.936					4.952
	FST4	0.873					3.481
	FST5	0.918					4.378
	Monthly Income						1
PFW	PFW1	0.896	0.932	0.941	0.948	0.785	3.74
	PFW2	0.904					4.121
	PFW3	0.889					3.695
	PFW4	0.861					2.969
	PFW5	0.88					3.879
	Monthly Income x FB						1
	Monthly Income x FST						1

Source(s): *Authors' own work*

Table 4 shows construct validity, factor loadings, and multicollinearity statistics (VIF) for the research constructs. All components have factor loadings of 0.779 to 0.935, exceeding the recommended threshold of 0.7, confirming indication dependability (Hair et al., 2022). Cronbach's alpha values for all constructs (FB = 0.897, FSF = 0.899, FST = 0.938, PFW = 0.932) indicate high internal consistency, and composite reliability values (rho_a and rho_c) exceed the recommended threshold of 0.7 (Henseler et al., 2015). Average variance extracted (AVE) values of 0.706–0.801 exceed the 0.5 requirement, proving convergent validity. The Variance Inflation Factor (VIF) showed no major multicollinearity issues with values from 2.518 to 3.879, all below the cautious limit of 5 (Kock, 2015). These findings corroborate the measurement devices' reliability and validity for structural equation modeling analysis.

Table 5: *Factors' cross loadings*

Constructs	FB	FSF	FST	Monthly Income	PFW	Monthly Income x FST	Monthly Income x FB
FB1	0.795						
FB2	0.874						
FB3	0.857						
FB4	0.884						
FB5	0.79						
FSF1		0.83					
FSF2		0.852					
FSF3		0.838					
FSF4		0.818					
FSF5		0.875					
FST1			0.876				
FST2			0.872				
FST3			0.936				
FST4			0.873				
FST5			0.918				
Monthly Income				1			
PFW1					0.896		
PFW2					0.904		
PFW3					0.889		
PFW4					0.861		
PFW5					0.88		
Monthly Income x FB							1

Monthly Income x FST	1

Source(s): *Authors' own work*

Table 5 shows the study construct cross-loadings, which are necessary for measurement model discriminant validity assessment. The table displays indicator loadings for Financial Behaviour (FB), Financial Satisfaction (FSF), Financial Stress (FST), Monthly Income, Personal Financial Well-Being (PFW), and moderation terms (Monthly Income × FST and Monthly Income × FB). Cross-loadings show how well each indicator connects with its latent concept compared to others. The table shows that all indicators have substantial loadings on their constructions, exceeding the 0.7 criterion (Hair et al., 2017), indicating indicator dependability. FB indicators (FB1–FB5) load 0.79–0.884 on the FB construct but not on other constructs, indicating construct differentiation. Convergent validity is confirmed by FSF indicators loading between 0.818 and 0.875 and FST indicators loading substantially (0.872–0.936). PFW indicators have strong loadings (0.861–0.904), indicating that the scale accurately measures personal financial well-being.

The interaction terms (Monthly Income × FST and Monthly Income × FB) exhibit perfect loadings of 1 on their constructs, characteristic of PLS-SEM latent variable interactions using product indicators. Monthly Income is a single-item construct with a loading of 1, representing its observed status. These cross-loadings show that each indicator primarily loads on its theoretical concept, proving discriminant validity and validating the measurement model for structural model assessment.

Table 6: *HTMT (Heterotrait-Monotrait ratio)*

Constructs	FB	FSF	FST	Monthly Income	PFW	Monthly Income x FST	Monthly Income x FB
FB							
FSF	0.482						
FST	0.431	0.528					
Monthly Income	0.118	0.171	0.187				
PFW	0.407	0.439	0.427	0.119			
Monthly Income x FST	0.145	0.047	0.367	0.263	0.053		
Monthly Income x FB	0.182	0.154	0.155	0.161	0.224	0.45	

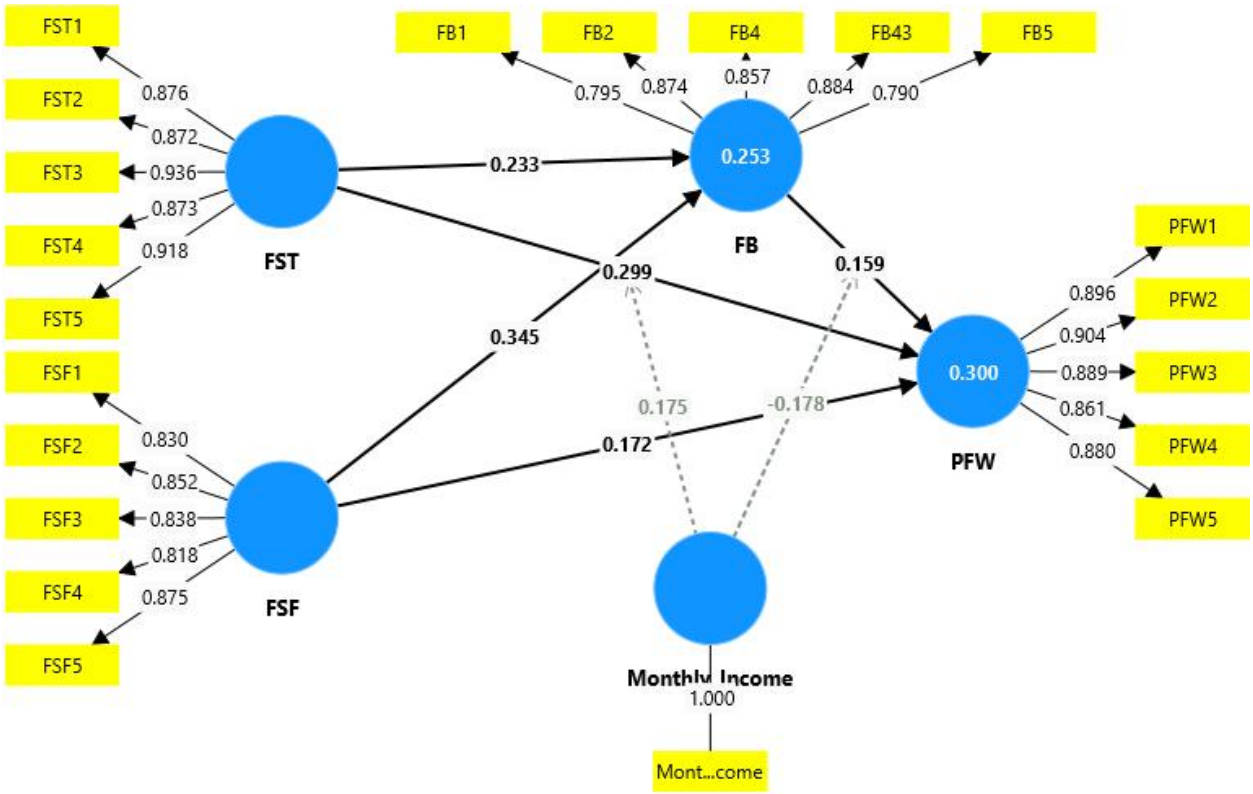
Source(s): *Authors 'own work*

Table 6 shows the Heterotrait-Monotrait (HTMT) correlation ratio, a common PLS-SEM discriminant validity criterion (Henseler, Ringle, & Sarstedt, 2015). HTMT values estimate the ratio of between-construct to within-construct correlations, demonstrating construct empirical

distinction. Discriminant validity is shown by values below 0.85 (or 0.90 in more mild instances). The HTMT values in this study range from 0.047 to 0.528, indicating that the constructs—Financial Behaviour (FB), Financial Satisfaction (FSF), Financial Stress (FST), Monthly Income, Personal Financial Well-Being (PFW), and their interaction terms (Monthly Income × FST and Monthly Income × FB)—are distinct and measure distinct theoretical concepts.

The maximum HTMT value between FST and FSF is 0.528, showing a moderate correlation but below the threshold, preventing multicollinearity. Other constructs, such as moderation interaction terms, have low HTMT values (e.g., Monthly Income × FST ranges from 0.047 to 0.367), indicating statistically separate moderation variables. These findings confirm the measurement model's discriminant validity and indicate that the latent variables are suitable for structural model analysis and hypothesis testing.

Figure 2: *Measurement Model*



The figure 2 measurement model (structural equation) model shows how financial stress, satisfaction, behaviour, well-being, and monthly income relate. Financial behaviour is influenced by both financial stress and contentment, with financial happiness (β = 0.345) having a higher positive impact than financial stress (β = 0.233). Financial behaviour has a small beneficial impact on personal financial well-being (β = 0.159). Both financial stress (β = 0.299) and

financial contentment (β = 0.172) impact personal financial well-being, with financial stress having a bigger impact. Interestingly, monthly income positively impacts personal financial well-being (β = 0.175) but negatively impacts financial behaviour (β = -0.178), demonstrating that increased income does not inevitably result in better financial habits. The model explains 25.3% of financial behaviour and 30.0% of personal financial well-being, showing that psychological and behavioural aspects influence financial outcome.

Table 7: *Path analysis*

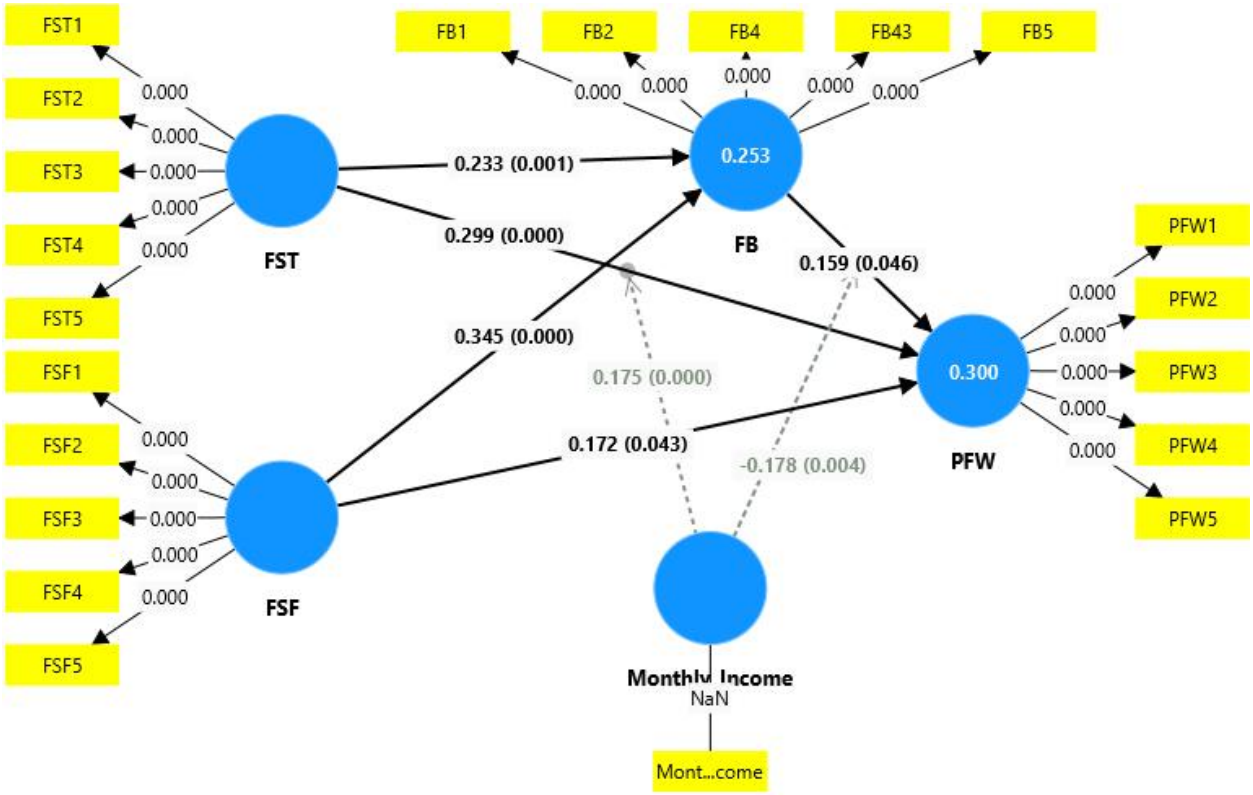
Hypothesis	Path	Path co-efficient	T statistics (|O/STDEV|)	P values	Result
H1	FB -> PFW	0.159	1.998	0.046	Accepted
H2	FSF -> FB	0.345	4.5	0	Accepted
H3	FSF -> PFW	0.172	2.026	0.043	Accepted
H4	FST -> FB	0.233	3.25	0.001	Accepted
H5	FST -> PFW	0.299	4.402	0	Accepted
H6	Monthly Income -> PFW	0.042	0.958	0.338	Rejected
H7	Monthly Income x FST -> PFW	0.175	3.56	0	Accepted
H8	Monthly Income x FB -> PFW	-0.178	2.877	0.004	Accepted
H9	FSF -> FB -> PFW	0.055	1.801	0.072	Rejected
H10	FST -> FB -> PFW	0.037	1.539	0.124	Rejected

Source(s); *Authors' own work*

Path analysis (Table 7) shows several important construct-relationships. Financial behaviour (FB) significantly impacts personal financial well-being (PFW) (H1: β = 0.159, p = 0.046), highlighting the significance of sensible financial practices in improving financial results. Financial stress factors (FSF) and stress (FST) significantly impact financial behaviour (FB) and financial well-being (PFW) (H2: β = 0.345, p < 0.001; H4: β = 0.233, p = 0.001; H3: β = 0.172, p = 0.043; H5: β = 0.299, p < 0.001). FSF and FST affect financial outcomes through behavioural mechanisms and well-being, according to these findings.

Monthly income did not significantly affect PFW (H6: β = 0.042, p = 0.338), suggesting that income alone does not ensure financial well-being. Monthly income significantly influenced the link between FST and PFW positively (H7: β = 0.175, p < 0.001) and negatively (H8: β = –0.178, p = 0.004). This shows that increased income mitigates financial stress but reduces the role of financial behaviour in well-being. No mediation effects through FB were found, as neither FSF (H9: β = 0.055, p = 0.072) nor FST (H10: β = 0.037, p = 0.124) indirectly impacted PFW. These data show that financial stresses and stress directly affect financial well-being, while income moderates.

Figure 1: *Path Model*



The PLS-SEM path model shows the structural links between Financial Stress (FST), Financial Satisfaction (FSF), Financial Behaviour (FB), Monthly Income, and Personal Financial Well-Being. The measurement model, represented by arrows from latent constructs to indicators (e.g., FST1–FST5, FB1–FB5, PFW1–PFW5), demonstrates significant loadings ($p < 0.001$), demonstrating reliable indicator measurement. In the structural model, FST positively correlates with FB ($\beta = 0.233$, $p = 0.001$) and PFW ($\beta = 0.299$, $p < 0.001$), indicating that financial stress impacts economic behaviour and well-being. FSF strongly predicts FB ($\beta = 0.345$, $p < 0.001$) and PFW ($\beta = 0.172$, $p = 0.043$), demonstrating financial happiness impacts behaviour and well-being. FB favourably affects PFW ($\beta = 0.159$, $p = 0.046$), indicating its mediation effect. Monthly income moderates the favourable effect of FSF on FB ($\beta = 0.175$, $p < 0.001$) and marginally weakens the influence of FB on PFW ($\beta = -0.178$, $p = 0.004$). The model shows that financial stress and pleasure affect personal financial well-being directly and indirectly through financial behaviour, with income as a contextual mediator.

Table 8*: Hypothesis testing*

Hypothesis	Path	Path co-efficient	T statistics (|O/STDEV|)	P values	Result

H1	FB -> PFW	0.159	1.998	0.046	Accepted
H2	FSF -> FB	0.345	4.5	0.000	Accepted
H3	FSF -> PFW	0.172	2.026	0.043	Accepted
H4	FST -> FB	0.233	3.25	0.001	Accepted
H5	FST -> PFW	0.299	4.402	0.000	Accepted
H6	Monthly Income -> PFW	0.042	0.958	0.338	Rejected
H7	Monthly Income x FST -> PFW	0.175	3.56	0.000	Accepted
H8	Monthly Income x FB -> PFW	-0.178	2.877	0.004	Accepted
H9	FSF -> FB -> PFW	0.055	1.801	0.072	Rejected
H10	FST -> FB -> PFW	0.037	1.539	0.124	Rejected

Source(s); *Authors' own work*

Discussions

Financial behaviour and income patterns have an effect on financial stress, contentment and well-being. First, extensive consumer research shows that budgeting, bill-paying regularity, saving, and credit management are found to have a strong correlation with financial well-being, regardless of demographics (Shi et al., 2021). (Netemeyer, Warmath, Fernandes, and Lynch, 2018) formalise PFW as a unique construct that is linked to money management practices and future security. Their findings suggests that even small behavioural changes increases PFW. Second, scarcity psychology explains the importance of behaviour. Stress and poverty tax attention and self-control, causing households to make bad decisions that are costly in the short term but beneficial in the long term. This heterogeneity of behavior highlights the need to move beyond generic models of economic behaviour to account for individual variations in financial behaviour and financial wealth (Stromback et al., 2017). Feedback loops: Politics: Economics & psychology Show that financial stress affects the quality of decisions, perpetuating stress and decreasing happiness. Stress can decrease financial behavior and well-being at the same time because of this process.

Income increases certain factors of well-being. High wealth is a consistent appraiser of life but has a negative impact upon affective well being implying diminishing marginal gains for "how people feel" on a day-to-day basis. On the opposite, people with a high financial self-control and self-efficience are likely to gain financial wellness, even in the face of economic fluctuations (Hernandez- perez & Rambaud, 2025). Income can provide slack in the event of stress, but money management practice and laws are important. Additionally, income tends to moderate the effect of stress on PFW more than in direct causal impacts on PFW. Fourth, all capability investments do not enhance results. A meta-analysis in Management Science concluded that there is little evidence of an impact of financial literacy instruction alone, as behavioural design influences little of the downstream behaviours, particularly in low income populations with greater limitations (Bruijn et al., 2022; Kaiser et al., 2021; Velasco, 2022). This explains why stress and happiness seem to be more often related to PFW than general literacy measures choice

architecture and habit scaffolding (earsmarking, partitioning) outperform information-only approaches in both strain.

Finally, the paper provides an empirically-viable synthesis: Consumer Protection regulators should focus on reducing stress halogen leakage, design frictions and cues that make good behaviors the new norm and also acknowledge income as active slack that mediates the relationship between stress and behavior and satisfaction and PFW generally. The pricing constraints imposed by self-control that induce over-indebtedness and credit-intermediation are mitigated by the cost-effective behavioural mechanisms that can be used to encourage inter-temporal saving, such as automatic transfers, labelled saving accounts, and enforced termination rules for spending. Furthermore, promoting financial literacy and all related factors such as mental budgeting and self-control are important to improve subjective financial wellbeing, especially in the mediation of informed investment decision making behaviours (Bai, 2023). Thus, policy and program design should aim to reduce stress and provide context sensitive behaviour supports with the awareness that there are marginal returns to income based on family behavioural systems.

Implications

Budgeting, regular saving and on-time bill payments are more predictive than knowledge gains of perceived PFW. Meta-analytic and empirical research suggests that financial education alone has a small impact on downstream behaviour, as such, programmes should incorporate behaviourally-oriented tools (defaults, reminders and automatic transfers) rather than classroom-style training.

The literature of the psychology of poverty indicates that scarcity and financial stress lead to a depletion of attention and self-control, which lead to short-sighted financial choices, with detrimental consequences for behaviour and well-being. Thus, good policy should try to minimise stresses (e.g. simplify access to benefits, stabilise cash flow) and/or involve "bandwidth-saving" aids to take the burden of decision making off their shoulders. Financial slack from higher income may decrease stress but it will not increase emotional well-being or money management. Hence, it would be a program of research and experimentation to use income as a moderator, and use behavioural scaffolding in conjunction with income to convert slack to stable routines and savings.

Earmarked accounts, partitioning, labelled savings, and automated contributions help the low-income population to save and discipline. These measures work because they influence choice architecture and undermine discretionary control over behaviour and are generally more successful than information-only methods. Dual strategies that (a) diminish the impacts of acute stressors (timely emergency relief, access to low-cost credit) and (b) enhance subjective financial satisfaction (transparent budgeting tools, forward-looking planning) will lead to bigger gains in PFW compared to single track programs since stress has a direct impact on PFW and an indirect impact by undermining behaviour. There is evidence in favour of 'joining up' demand-side (income/stress alleviation) and supply-side (behavioural design) approaches. Using of heterogeneity analysis and behaviourally significant results to evaluate programs. Many educational interventions 7.0 Small average impacts so researchers and practitioners should track actual behaviours (transaction data, automatic transfers, default opt-ins) and look at different

effects (by income, stress, self control). This will indicate where interventions work best and whether income supplements/facilitating behaviors have binding effects.

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