

Financial Self-Efficacy and Saving Behaviour of Kenyan University Staff: The Mediating Role of Financial Well-Being

Dennis Kiplangat Moi¹, Lydia Jeptoo Maket²

¹Department of Accounting & Finance, Moi University, Eldoret, Kenya

²Department of Management Science & Entrepreneurship Studies, Moi University, Eldoret, Kenya

Email: arapdkmoi@gmail.com, kapkai2000@gmail.com

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Abstract

The purpose of the current paper is to explore the effect of financial self-efficacy on saving behaviour among university staff in Kenya. In addition, the paper endeavoured to examine the mediating role of financial well-being between financial self-efficacy and saving behaviour. Our study deemed the bi-directional nature of the attributes of these financial capabilities in real life context. To achieve the aforementioned objectives, the study was anchored on social cognitive theory and subjective well-being theory. The study targeted university employees drawn from eight public universities in Western Kenya based on the geographical location. The paper adopts a survey by questionnaire method to gather data from 350 university employees through stratified and simple random sampling techniques. The hypotheses were tested using PROCESS 4.2 (Model 4). This study found a positive relationship between financial self-efficacy and saving behaviour ($\beta = 0.4149$, $p < 0.05$). Furthermore, financial well-being partially mediates the relationship between financial self-efficacy and saving behaviour ($\beta = 0.2406$, $p < 0.05$). Thus, our study demonstrates that there is both a direct and indirect relationship between financial self-efficacy and saving behaviour through financial well-being. Given the current economic challenges, understanding how university employees manage their finances with a saving mindset has become a critical concern for institutions. As a result, university leaders need to provide professional avenues through which their employees can be encouraged to effectively manage their funds and save in order to improve their financial well-being. The findings of this study add to knowledge by giving significant evidence on the determinants of saving behaviour and financial well-being among university employees. The indirect mediation results provide new insights into theory and practice. This is critical to learning about the idea of financial well-being and addressing empirical and practical gaps in academic settings.

Keywords

Financial Well-Being, Saving Behaviour, Financial Self-Efficacy, University Employee, Mediation Analysis, Kenya

1. Introduction

Well-being is a multifaceted construct that describes an individual's overall life view and has been extensively linked to the ability to overcome personal, social, economic, and health-related concerns (McLellan, 2017; Abebe & Myint, 2018). Among the various domains of human well-being, financial, career, physical, social, and community dimensions serve as foundational pillars for individual life satisfaction (Zemtsov & Osipova, 2016; Diener et al., 2018). Extant literature consistently indicates that financial stability and perceived financial security are linked overall subjective well-being (Netemeyer et al., 2018; Wilmarth, 2021; Brügger et al., 2017). In volatile economic environments where institutions grapple with macroeconomic instability, inflationary pressures, and constrained resource allocation, the manner in which individuals manage their personal finances becomes increasingly critical (Lusardi & Mitchell, 2014; She et al., 2022). Consequently, the distinctive nature and scope of individual well-being vary significantly, with the financial domain emerging as a central driver of psychological and behavioural outcomes. This domain-specific manifestation is commonly termed financial well-being (FWB).

Financial well-being is broadly defined as an individual's perceived capacity to satisfy current and ongoing financial commitments, feel secure about their financial future, and make economic choices that enable them to enjoy life without pervasive financial stress (Brügger et al., 2017; CFPB, 2015). Early empirical research demonstrates that higher levels of FWB significantly enhance workplace productivity, organizational commitment, job satisfaction, and long-term financial performance (Bailey, 2019; Jackson & Fransman, 2018; Farrington, 2017), while simultaneously mitigating financial anxiety and psychological distress (Choi et al., 2020; Strömbäck et al., 2017). Conversely, diminished FWB is strongly associated with elevated stress levels, cognitive depletion, reduced concentration, increased absenteeism, and impaired decision-making capacity, which collectively undermine both individual welfare and institutional efficiency (Ullah & Yusheng, 2020; She et al., 2022; Gennetian & Shafir, 2015).

Despite its growing prominence in behavioural finance, organizational psychology, and public policy, FWB remains a relatively nascent construct in empirical research, particularly within emerging economy contexts. Studies on FWB are often fragmented across disciplines, with predominant attention focused on developed economies that leverage comprehensive national surveys such as the National Financial Capability Study in the United States (Xiao and Porto, 2022; Wagner & Walstad, 2019; Lusardi et al., 2020). While recent scholarship has begun

exploring FWB among diverse populations in developing countries (Mokhtar & Husniyah, 2017; Pretorius & Blaauw, 2020; Kamakia et al., 2017), there remains a pronounced empirical gap concerning FWB within African public university contexts. Understanding the antecedents and behavioural manifestations of FWB among academic and administrative staff in Kenyan public universities is therefore both theoretically compelling and practically urgent.

University employees in Kenya, like their counterparts across many emerging economies, operate within institutional environments characterized by systemic financial stressors, including delayed salary disbursements, pension uncertainties, rising cost of living, and limited structured financial wellness programming (Byarugaba et al., 2025; Fouché & Manyapelo, 2020; Dlamini & Dlamini, 2024). These structural constraints frequently compromise rational financial decision-making, exacerbate debt accumulation, and diminish long-term financial security (Gennetian & Shafir, 2015; Strömbäck et al., 2017). In such contexts, psychological constructs like financial self-efficacy (FSE)—defined as an individual's confidence in their ability to execute financial tasks, navigate economic uncertainties, and maintain disciplined monetary habits (Bandura, 1997; Lown, 2011; Farrell et al., 2016)—emerge as critical determinants of financial behaviour. Individuals with high FSE are more likely to engage in proactive financial planning, maintain consistent saving habits, and exhibit resilience against financial shocks (Chong et al., 2021; Xiao & Porto, 2022).

The intersection of FSE, saving behaviour, and FWB remains underexplored, particularly regarding the psychological mechanisms that translate confidence into action and subsequent well-being. While empirical evidence suggests that financially confident individuals tend to exhibit more prudent financial behaviours (Chatterjee et al., 2011; Farrell et al., 2016; Montford & Goldsmith, 2016), the precise pathway through which FSE influences saving behaviour remains theoretically contested. Does FSE directly drive saving behaviour, or does it operate indirectly by first enhancing perceived financial well-being, which in turn reinforces saving habits? Behavioural economics and social cognitive theory posit that psychological well-being often serves as a critical mediating mechanism between self-beliefs and behavioural outcomes (Bandura, 1997; Kahneman, 2011; Thaler & Sunstein, 2008). Individuals who perceive themselves as financially secure are more likely to adopt disciplined saving routines, avoid impulsive spending, and maintain long-term financial planning horizons (Gutter & Copur, 2011; Strömbäck et al., 2017).

In Kenya, the national financial landscape reflects both progress and persistent challenges. The *FinAccess Household Survey (2024)* indicates that while financial inclusion has expanded significantly, only a minority of Kenyans report robust financial health. Declining financial health indices are attributed to low savings rates, high debt-to-income ratios, and insufficient financial capability (FinAccess Household Survey, 2024; Abdallah et al., 2025). These macroeconomic realities underscore the necessity of investigating micro-level psychological and behav-

journal determinants of financial outcomes, particularly among stable, educated workforces such as university staff. Despite holding advanced qualifications and relatively secure employment, many Kenyan university employees struggle with financial stress, inadequate retirement planning, and inconsistent saving habits (Kamakia et al., 2017; Byarugaba et al., 2025). This paradox raises critical questions about whether psychological confidence (FSE) translates into tangible financial behaviours (saving) and whether perceived financial well-being serves as a catalytic mechanism in this process.

The present study addresses these gaps by rigorously examining the direct and indirect relationships between financial self-efficacy, financial well-being, and saving behaviour among 350 working adults across eight public universities in Western Kenya. Utilizing a validated psychometric framework and advanced mediation model 4 analysis (Hayes' PROCESS 4.2), the study tests a theoretically grounded model wherein financial well-being mediates the relationship between financial self-efficacy and saving behaviour. By anchoring the investigation in Social Cognitive Theory and Subjective Well-Being Theory, the study contributes to behavioural finance and organizational psychology literature in three substantive ways. First, it provides empirical evidence on the mediating role of FWB, addressing theoretical ambiguities regarding how psychological confidence translates into financial action. Second, it employs robust statistical techniques (bootstrapped mediation analysis) to isolate direct and indirect effects while controlling for socio-demographic covariates, thereby enhancing methodological precision. Third, it contextualizes findings within an under-researched African academic workforce, offering culturally relevant insights for financial wellness programming and institutional policy design.

Practically, the findings carry significant implications for university human resource departments, financial educators, and national policymakers. If financial well-being partially mediates the FSE-saving behaviour relationship, interventions should prioritize holistic financial wellness frameworks that simultaneously enhance psychological confidence, perceived security, and habitual saving practices, rather than focusing narrowly on financial literacy or demographic targeting. Policy recommendations emphasize employer-supported financial counseling, institutional wellness initiatives, and national campaigns that transcend traditional segmentation.

The remainder of this paper is organized as follows: Section 2 presents the theoretical framework, synthesizes empirical literature, and develops testable hypotheses. Section 3 outlines the research design, sampling procedure, measurement instruments, and analytical strategy. Section 4 reports descriptive statistics, reliability/validity assessments, correlation matrices, and mediation outputs. Section 5 discusses findings in relation to existing theory and practice. Section 6 delineates theoretical, practical, and policy implications, acknowledges limitations, and proposes future research directions. The paper concludes with a synthesis of key insights and actionable recommendations for stakeholders in Kenya's higher

education and financial wellness ecosystems.

2. Theoretical Framework and Hypotheses Development

2.1. Theoretical Foundations

The investigation of financial self-efficacy, financial well-being, and saving behaviour is informed by two complementary theoretical paradigms: Social Cognitive Theory (SCT) and Subjective Well-Being Theory (SWBT). Each framework offers distinct yet converging explanations for how psychological confidence, perceived financial security, and behavioural outcomes interact within organizational and emerging economy contexts.

Social Cognitive Theory, pioneered by [Bandura \(1997\)](#), posits that human behaviour is shaped by reciprocal interactions between personal factors (cognitive appraisals, self-beliefs, emotional regulation), environmental conditions (institutional support, economic volatility, social norms), and behavioural outcomes (actual financial management practices). Within financial contexts, SCT emphasizes that financial self-efficacy is not merely an inherited trait but a malleable psychological construct cultivated through mastery experiences, vicarious learning, verbal persuasion, and physiological feedback ([Lown, 2011](#); [Farrell et al., 2016](#); [Chong et al., 2021](#)). Individuals who successfully navigate budgeting, debt management, or investment decisions develop reinforced financial confidence, which in turn increases the likelihood of future prudent financial behaviours such as consistent saving, emergency fund development, and retirement planning ([Mulasi & Mathew, 2021](#); [Xiao & Porto, 2022](#)). SCT further suggests that self-efficacy influences behaviour both directly and indirectly, often operating through psychological mediators such as perceived control, stress reduction, and enhanced decision-making capacity ([Bandura, 1997](#); [Chatterjee et al., 2011](#)). In volatile economic environments, SCT predicts that individuals with high FSE will exhibit greater financial resilience, maintain disciplined saving habits, and report higher subjective financial well-being, as confidence buffers against uncertainty and promotes proactive financial planning ([Kamakia et al., 2017](#); [She et al., 2022](#)).

Subjective Well-Being Theory, rooted in the broader psychological literature on happiness and life satisfaction ([Diener et al., 1999](#); [Kahneman & Deaton, 2010](#)), conceptualizes well-being as a multidimensional construct encompassing cognitive evaluations of life circumstances, emotional experiences, and domain-specific satisfaction. Financial well-being, as a domain-specific manifestation of SWB, reflects an individual's perceived financial security, satisfaction with current financial status, and confidence in future financial stability ([Brüggen et al., 2017](#); [CFPB, 2015](#); [Netemeyer et al., 2018](#)). SWBT posits that perceived well-being is not merely a passive outcome of income or wealth but an active psychological state influenced by cognitive appraisals, behavioural habits, and environmental framing ([Diener et al., 2018](#); [Patel & Wolfe, 2019](#)). Individuals who perceive themselves as financially well are more likely to engage in long-term planning, avoid impulsive financial decisions, and maintain consistent saving behaviours, as perceived security

reduces financial anxiety and enhances cognitive bandwidth for rational decision-making (Gennetian & Shafir, 2015; Strömbäck et al., 2017; Eberhardt et al., 2021). Conversely, financial stress depletes psychological resources, leading to present bias, debt accumulation, and diminished saving capacity (Kahneman, 2011; Lusardi & Mitchell, 2014). SWBT thus positions financial well-being as both an outcome of psychological confidence and a catalyst for sustained financial behaviour.

Behavioural Economics provides additional explanatory depth by highlighting how psychological heuristics, cognitive biases, and environmental defaults shape financial decision-making (Kahneman & Tversky, 1979; Thaler & Sunstein, 2008; Eberhardt et al., 2021). Key concepts such as mental accounting, loss aversion, present bias, and default effects demonstrate that financial behaviour is rarely purely rational but heavily influenced by psychological framing and perceived security (Shefrin & Thaler, 1988; Thaler & Benartzi, 2004). From this perspective, financial self-efficacy enhances perceived financial well-being by reducing uncertainty anxiety and promoting proactive financial habits, which in turn reinforce saving behaviour through positive feedback loops (Chong et al., 2021; Xiao & Porto, 2022). Collectively, SCT, SWBT, and behavioural economics yield converging predictions: financial self-efficacy directly promotes saving behaviour, but this relationship is partially channeled through enhanced financial well-being, which serves as a psychological bridge between confidence and action.

2.2. Hypotheses Development

2.2.1. Financial Self-Efficacy and Financial Well-Being

Social Cognitive Theory posits that self-efficacy beliefs directly influence psychological well-being by enhancing perceived control, reducing anxiety, and fostering positive outcome expectancies (Bandura, 1997; Lown, 2011). In financial contexts, individuals with high FSE report greater confidence in managing monetary resources, which translates into reduced financial stress, enhanced perceived security, and higher subjective financial well-being (Farrell et al., 2016; Chatterjee et al., 2011; Montford & Goldsmith, 2016). Empirical studies consistently demonstrate positive associations between FSE and FWB across diverse populations, with financially confident individuals exhibiting greater satisfaction with their financial status and stronger future financial optimism (Xiao & Porto, 2022; Sabri et al., 2020; Letkiewicz & Fox, 2014). In Kenyan university contexts, where institutional financial stressors are prevalent, FSE may serve as a critical psychological buffer, enabling employees to maintain positive financial appraisals despite external economic constraints (Byarugaba et al., 2025; Dlamini & Dlamini, 2024). We therefore hypothesize:

H1: Financial self-efficacy will be positively associated with financial well-being among university staff in Kenya.

2.2.2. Financial Well-Being and Saving Behaviour

Subjective Well-Being Theory suggests that perceived financial security enhances cognitive bandwidth, reduces present bias, and promotes long-term planning ori-

entation (Diener et al., 2018; Kahneman, 2011; Strömbäck et al., 2017). Individuals who feel financially well are more likely to engage in disciplined saving habits, maintain emergency funds, and avoid impulsive spending, as perceived security diminishes anxiety-driven financial decisions (Gutter & Copur, 2011; Chong et al., 2021; Rahman et al., 2021). Empirical research confirms that FWB positively predicts saving behaviour, budget adherence, and retirement planning across emerging and developed economies (Mahdzan et al., 2019; Xiao et al., 2014; Lussardi et al., 2017). In Kenyan public universities, where salary delays and inflationary pressures threaten financial stability, FWB may serve as a psychological catalyst for consistent saving practices, enabling employees to navigate economic uncertainties with greater discipline (FinAccess Household Survey, 2024; Kamakia et al., 2017). We hypothesize:

H2: Financial well-being will be positively associated with saving behaviour among university staff in Kenya.

2.2.3. Financial Self-Efficacy and Saving Behaviour

Social Cognitive Theory predicts that self-efficacy directly influences behavioural outcomes by enhancing motivation, persistence, and goal-directed action (Bandura, 1997; Farrell et al., 2016). Financially confident individuals are more likely to set monetary goals, adhere to budgets, and maintain consistent saving habits, as self-belief translates into behavioural commitment (Lown, 2011; Chong et al., 2021; Mulasi & Mathew, 2021). Empirical studies demonstrate direct positive relationships between FSE and saving behaviour, with high-efficacy individuals exhibiting greater financial discipline and lower debt accumulation (Chatterjee et al., 2011; Sabri et al., 2020; Letkiewicz & Fox, 2014). In volatile economic environments, FSE may directly drive saving behaviour by fostering resilience against financial shocks and promoting proactive financial planning (Xiao & Porto, 2022; She et al., 2022). We hypothesize:

H3: Financial self-efficacy will be positively associated with saving behaviour among university staff in Kenya.

2.2.4. The Mediating Role of Financial Well-Being

Integrating SCT and SWBT, financial well-being is theorized to partially mediate the relationship between financial self-efficacy and saving behaviour. FSE enhances perceived financial security and reduces anxiety, which in turn promotes cognitive clarity, long-term planning, and disciplined saving habits (Bandura, 1997; Diener et al., 2018; Strömbäck et al., 2017). Empirical mediation studies confirm that psychological well-being channels the effects of financial confidence into tangible behavioural outcomes, with FWB serving as a critical mechanism linking self-beliefs to financial action (She et al., 2022; Chong et al., 2021; Sabri et al., 2021). In Kenyan university contexts, where structural financial stressors may attenuate direct efficacy-behaviour linkages, FWB may provide the psychological stability necessary to translate confidence into consistent saving practices (Byarugaba et al., 2025; Dlamini & Dlamini, 2024). We hypothesize:

H4: Financial well-being will partially mediate the relationship between financial self-efficacy and saving behaviour among university staff in Kenya.

2.3. Conceptual Model

Figure 1 presents the conceptual framework guiding this study. Financial self-efficacy (X) is modelled as the independent predictor, financial well-being (M) as the mediator, and saving behaviour (Y) as the dependent outcome. Socio-demographic variables (gender, age, education, job designation, work experience) are included as covariates to control for potential confounding effects. The model assumes direct linear relationships while testing indirect mediation pathways, consistent with Hayes' (2022) PROCESS 4.2 framework and standard mediation assumptions (MacKinnon et al., 2012; Fairchild & MacKinnon, 2009) (**Table 1**).

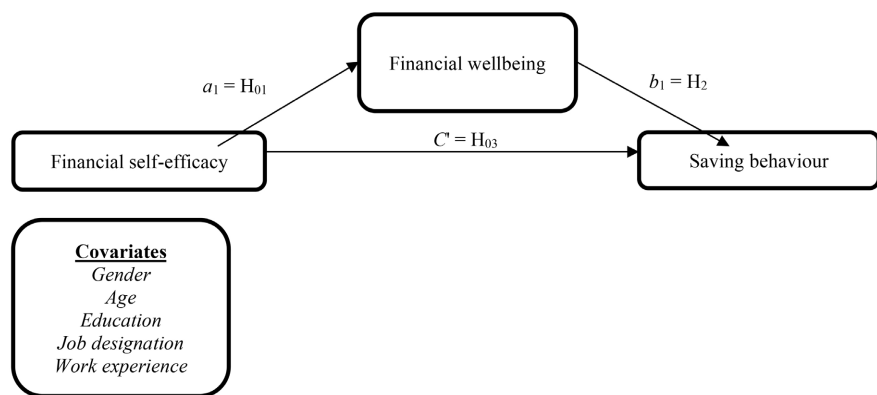


Figure 1. Conceptual model of financial self-efficacy, financial well-being, and saving behaviour. Source: Hayes (2018) Model 4.

Table 1. Summary of hypotheses.

Hypothesis	Pathway	Expected Direction	Theoretical Basis
H1	FSE → FWB	Positive	Social Cognitive Theory
H2	FWB → Saving Behaviour	Positive	Subjective Well-Being Theory
H3	FSE → Saving Behaviour	Positive	Social Cognitive Theory
H4	FSE → FWB → Saving Behaviour	Partial Mediation	Integrated SCT & SWBT

3. Data and Methods

3.1. Research Design

This study employs an explanatory, cross-sectional survey design to examine the direct and indirect relationships between financial self-efficacy, financial well-being, and saving behaviour among working adults in Kenyan public universities. The university act of 2012 provides a general framework for chartering universi-

ties in Kenya. The universities were selected based on their geographical locality on the whole of Western Kenya, that is west of Nakuru city. The inclusion criteria, a fully chartered publicly-funded university excluding publicly-funded university colleges (Koitaleel Samoei, Alupe and Turkana university colleges) and privately-chartered universities and university colleges. The study employed a proportionate stratified random sampling at university levels and randomization at departmental levels. Cross-sectional designs are appropriate for testing the direct relationships and mediation pathways at a single point in time, particularly when investigating psychological and behavioural antecedents that are relatively stable across short intervals (Sekaran, 2016; Tabachnick & Fidell, 2019). The explanatory nature of the design enables hypothesis testing through multiple regression and bootstrapped mediation analysis, isolating the unique contribution of each psychological predictor while controlling for multicollinearity and confounding variables (Field, 2018; MacKinnon et al., 2012; Hayes, 2022). Given the study's focus on psychological financial confidence and behavioural readiness, a survey-based approach ensures measurement of perceptual and action-oriented dimensions of financial management (Xiao & Porto, 2022; Brügger et al., 2017).

3.2. Population, Sampling, and Data Collection

The target population comprises 9786 academic and administrative staff across eight public universities in Western Kenya. These institutions were selected due to their exposure to systemic financial stressors, including delayed capitation, salary arrears, pension uncertainties, and limited financial wellness programming (Byarugaba et al., 2025; Dlamini & Dlamini, 2024). Using Yamane's (1967) sample size formula at a 95% confidence level and 5% margin of error, a minimum sample of 385 respondents was determined. Stratified random sampling ensured proportional representation across job categories (academic, administrative, support staff), institutional tiers, and demographic strata. Questionnaires were distributed electronically and physically, with follow-up reminders to maximize response rates. Of 385 distributed instruments, 369 were returned, yielding 354 complete responses. Four cases were excluded due to extreme outliers or incomplete data, resulting in a final analyzable sample of 350 participants (91.9% effective response rate). This sample exceeds the minimum requirement for mediation analysis with five covariates (Field, 2018; Tabachnick & Fidell, 2019), providing adequate statistical power ($1 - \beta > 0.80$) for detecting medium effect sizes (Cohen, 1988).

3.3. Measurement of Variables

All constructs were measured using previously validated instruments, adapted to the Kenyan university context through pilot testing ($n = 30$) and expert review (three finance academics, two behavioural economists). Items were anchored on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Financial Self-Efficacy (FSE). An 8-item scale adapted from validated financial self-efficacy and behavioural intention instruments assessed the frequency, con-

sistency, and confidence of financial management practices. The items included; *I will be able to achieve most of the goals that I have set for myself, When facing difficult tasks, I am certain that I will accomplish them, In general, I think that I can obtain outcomes that are important to me, I believe I can succeed at most any endeavour to which I set my mind, I will be able to successfully overcome many challenges, I am confident that I can perform effectively on many different tasks, Compared to other people, I can do most tasks very well and Even when things are tough, I can perform quite well.* The items were contextualized to the study to captured both foundational financial management (e.g., budget adherence, expense tracking) and advanced financial planning (e.g., investment confidence, long-term goal setting). The scale demonstrates excellent internal consistency (Cronbach's $\alpha = 0.907$).

Financial Well-Being (FWB). Measured using the InCharge Financial Distress/Financial Well-Being (IFDFW) scale (Prawitz et al., 2006), an 8-item instrument capturing perceived financial security, satisfaction, and future financial confidence. The items were contextualized to the study and include the following statements: *I am satisfied with my personal finances, I feel happy about my current financial situation, I feel secure about my retirement plan, I am confident that I will have a financially comfortable retirement, I am confident finding the money to pay for a financial emergency cost, I frequently find myself eagerly waiting for the next payday, I often find it hard to financially enjoy doing things I love with my friends and family and I often worry about being able to meet my monthly living expenses.* The scale exhibited strong reliability (Cronbach's $\alpha = 0.857$).

Saving Behaviour (SB). Assessed using a 6-item validated scale (Dangol & Maharjan, 2018; Ariffin et al., 2017) measuring habitual saving practices, budget adherence, and financial goal pursuit. The items included: *I usually pay attention on the amount of money I set aside, I always stick to my money-management strategies, When I receive money, I always set aside a portion of it, I set aside money to accomplish specific objectives, I usually set aside funds for the future on a regular basis, and In order to save money, I often consider whether a purchase is necessary before making it.* The items were contextualized to the study and the scale demonstrated excellent internal consistency (Cronbach's $\alpha = 0.873$).

Socio-Demographic Covariates. Participants self-reported gender (0 = male, 1 = female), age (5-point categorical scale), education level (4-point ordinal scale), job designation (4-point hierarchical scale), and work experience (4-point tenure scale), consistent with standard demographic classification in financial behaviour research (Lusardi & Mitchell, 2014; Fisher & Anong, 2012).

3.4. Preliminary Analysis and Data Preparation

Data were analyzed using IBM SPSS Statistics Version 28 and PROCESS 4.2 (Hayes, 2022). Prior to hypothesis testing, data quality was assessed through missing value analysis, outlier detection, and assumption checking. Missing data (<2%) were handled via listwise deletion, justified by minimal missingness and

random distribution (Tabachnick & Fidell, 2019). Outliers were screened using z-scores ($|z| > 3.29$) and Mahalanobis distance; four cases were removed due to extreme response patterns. Normality was assessed via skewness/kurtosis (acceptable range: ± 2.0) and Shapiro-Wilk tests; all variables fell within acceptable bounds (Kline, 2015). Multicollinearity was evaluated using tolerance (> 0.20) and variance inflation factor ($VIF < 10.0$); diagnostics confirmed independence of predictors (Kutner et al., 2005; Stevens, 2012). Homoscedasticity was verified via residual plots, and linearity was confirmed through scatterplots and residual analysis (Field, 2018). Common method variance was assessed using Harman's single-factor test, yielding a first-factor variance of 32.1%, well below the 50% threshold, indicating minimal CMV bias (Podsakoff et al., 2003).

3.5. Analytical Strategy

Hypothesis testing proceeded through Hayes' (2022) PROCESS Model 4, a robust bootstrap-based mediation framework that simultaneously estimates direct, indirect, and total effects while controlling for covariates. The analytical strategy followed four sequential stages:

- 1) Descriptive Statistics: Means, standard deviations, and frequency distributions characterized the sample and variables.
- 2) Reliability and Factor Analysis: Cronbach's alpha and PCA confirmed scale psychometrics.
- 3) Bivariate Correlations: Pearson's r examined zero-order relationships among study variables and covariates.
- 4) Mediation Analysis: PROCESS Model 4 tested the direct effect of FSE on SB (path c'), the indirect effect via FWB (path $a \times b$), and the total effect (path c). Bias-corrected percentile bootstrap confidence intervals (5000 resamples) determined mediation significance at 95% CI. Model fit was assessed via R^2 , F-tests, and ANOVA. Individual predictor significance was evaluated using t-tests, standardized β coefficients, and 95% confidence intervals (Field, 2018; Hayes, 2022). All tests employed a two-tailed alpha level of 0.05, with results reported in compliance with APA 7th edition standards.

4. Results

4.1. Socio-Demographical Analysis

The descriptive statistics characterize the demographic profile of respondents across five key variables: gender, age, educational attainment, job designation, and work experience. The sample exhibited a slight male preponderance, with males constituting 55.1% ($n = 193$) while female participants accounted for 44.9% ($n = 157$). Respondents' ages revealed a workforce predominantly concentrated in early-to-mid career stages. The largest age cohort comprised individuals aged 33 - 43 years ($n = 136$; 38.9%), followed by those aged 44 - 54 years ($n = 83$; 23.7%) and 22 - 32 years ($n = 80$; 22.9%). Older employees aged 55 - 65 years represented 13.4% of the sample ($n = 47$), while only a minimal proportion (1.1%; $n = 4$) re-

ported being above 65 years of age. Educational qualifications reflected the credential-intensive nature of the university sector. Bachelor's degree holders constituted the largest group ($n = 140$; 40.0%), followed by diploma holders ($n = 103$; 29.4%). Postgraduate qualifications were well represented, with master's degree holders accounting for 20.6% ($n = 72$) and doctoral degree holders comprising 10.0% ($n = 35$). Tenure within the university system varied considerably. The most experienced cohort, those with more than 15 years of service, represented the largest experience category ($n = 119$; 34.0%). Mid-tenure staff with 5 - 9 years of experience constituted 32.3% ($n = 113$), while those with 10 - 14 years of service accounted for 20.6% ($n = 72$). Early-career employees with less than four years of experience comprised 13.1% ($n = 46$). Collectively, these demographic characteristics depict a sample of university employees who are predominantly male, mid-career, moderately to highly educated, and experienced in institutional service, providing essential context for interpreting subsequent psychological and behavioural analyses.

4.2. Reliability and Factor Analysis

Before analysis, items were examined using Harman's one factor to test for common method variance by entering study variables into factor analysis and the single-factor explained 37.862% way below the 50% threshold thus ruling out common method variance (Table 2).

Table 2. Factors analysis of the instrument.

	Factor					h²
	1	2	3	4	5	
Indicators of financial self-efficacy (α = 0.907)						
I will be able to achieve most of the goals that I have set for myself.				0.757		0.680
When facing difficult tasks, I am certain that I will accomplish them.				0.781		0.793
In general, I think that I can obtain outcomes that are important to me.				0.752		0.770
I believe I can succeed at most any endeavour to which I set my mind.			0.584	0.606		0.741
I will be able to successfully overcome many challenges.			0.635			0.704
I am confident that I can perform effectively on many different tasks.			0.855			0.823
Compared to other people, I can do most tasks very well.			0.860			0.807
Even when things are tough, I can perform quite well.			0.779			0.733
Indicators of Saving behaviour (α = 0.873)						
I usually pay attention to the amount of money I set aside.		0.716				0.560
I always stick to my money-management strategies		0.758				0.685
When I receive money, I always set aside a portion of it		0.803				0.744
I set aside money to accomplish specific objectives		0.781				0.694

Continued

I usually set aside funds for the future regularly	0.787	0.764				
To save money, I often consider whether a purchase is necessary before making it.	0.645	0.499				
Indicators of Financial wellbeing ($\alpha = 0.857$)						
I am satisfied with my finances	0.855	0.780				
I feel happy about my current financial situation	0.899	0.842				
I feel secure about my retirement plan	0.852	0.769				
I am confident that I will have a financially secure retirement	0.827	0.732				
I am confident finding the money to pay for a financial emergency cost	0.804	0.716				
I frequently find myself eagerly waiting for the next payday		0.831	0.757			
I often find it hard to financially enjoy doing things I love with my friends and family.		0.914	0.858			
I often worry about being able to meet my monthly living expenses		0.898	0.810			
						Total
Eigenvalue	3.989	3.865	3.294	2.677	2.435	
% of Variance	18.131	17.569	14.972	12.169	11.07	73.911
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.870						
Bartlett's Test of Sphericity, $\chi^2 = 5466.985$, $df = 231$, $p = 0.00$						
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations.						

Prior to factor analysis, data suitability was confirmed. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.870, exceeding the 0.60 minimum (Kaiser, 1974). Bartlett's Test of Sphericity was highly significant, $\chi^2(561) = 5466.985$, $p < 0.001$, indicating the correlation matrix was factorable (Tabachnick & Fidell, 2019). Principal Component Analysis with Varimax rotation extracted five factors explaining 73.911% of total variance. The Financial Self-Efficacy scale yielded two factors (Eigenvalues = 3.294 and 2.677), accounting for 27.141% of variance, with all items demonstrating strong primary loadings (0.584 - 0.860) and communalities above 0.60. The Financial Well-Being scale produced a two-factor solution (Eigenvalues = 3.989 and 2.435), explaining 29.202% of variance, with loadings ranging from 0.827 to 0.914. The Saving Behaviour scale loaded onto a single component (Eigenvalue = 3.865), explaining 17.569% of variance, with loadings between 0.645 and 0.803. Internal consistency was excellent across all constructs: FSE ($\alpha = 0.907$), FWB ($\alpha = 0.857$), and SB ($\alpha = 0.873$), substantially exceeding the 0.70 threshold for acceptable reliability (Nunnally & Bernstein, 1994). These psychometric results confirm the robustness and dimensionality of the measurement instruments, supporting their suitability for mediation analysis. After the conclusion of the factor analysis, the study generated a single index using

the geometric mean of the total number of items per variable to represent the study variable in correlation and regression analysis.

4.3. Bivariate Correlation Analysis

Table 3 presents Pearson bivariate correlations among all study variables. Financial self-efficacy demonstrated strong positive correlations with saving ($r = 0.483$, $p < 0.01$) and financial wellbeing ($r = 0.256$, $p < 0.01$), consistent with theoretical predictions. Financial well-being also correlated positively with saving behaviour ($r = 0.336$, $p < 0.01$), suggesting a meaningful behavioural linkage.

Table 3. Summary statistics.

Variable (N = 350)	Mean	SD (σ)	1	2	3
1) Financial Self Efficacy	4.0310	0.47253	1		
2) Saving behaviour	3.8690	0.50436	0.483*	1	
3) Financial Wellbeing	4.0049	0.47506	0.256*	0.336*	1

*significant levels at 0.05.

4.4. Multiple Regression and Mediation Analysis

The mediation model was tested using PROCESS Macro Version 4.2 (Model 4) with 5000 bootstrap resamples. **Table 4** presents the regression coefficients, standard errors, t-values, p-values, and confidence intervals for the total, direct, and indirect effects.

Table 4. Results for direct, indirect and total effects.

	Model 1 (FWB)				Model 2 (SB)			
	β	se	t	p	β	se	t	p
Constant	2.6474	0.4054	6.5296	0.000	0.1702	0.0409	4.1625	0.000
Gender	-0.0231	0.0893	-0.4381	0.661	0.0272	0.0095	0.5922	0.554
Age	0.0452	0.0551	0.6859	0.493	-0.561	0.0058	-0.9862	0.325
Education level	-0.2158	0.0711	-2.7101	0.007	0.1142	0.0066	1.8886	0.060
Job designation	-0.0539	0.0551	-0.7379	0.461	0.0714	0.0054	1.2124	0.226
Work experience	-0.0158	0.0501	-0.2500	0.802	0.0275	0.0045	0.5942	0.553
Financial self-efficacy	$a_1 = 0.2853$	0.0729	5.0115	0.000	$c' = 0.4149$	0.0078	8.2709	0.000
Financial Wellbeing					$b_1 = 0.2406$	0.0064	4.5672	0.000
R	0.3105				0.5382			
R ²	0.0964				0.2897			
F	5.9587				19.507			

Path a (FSE $\rightarrow$ FWB): Financial self-efficacy significantly associated with financial well-being ($\beta = 0.2853$, SE = 0.0729, t = 5.0115, $p < 0.001$). The model ex-

plained 9.64% of variance in FWB ($R^2 = 0.0964$, $F(7, 342) = 5.9587$, $p < 0.001$), indicating a strong psychological linkage between confidence and perceived financial security. None of the covariates reached statistical significance, confirming the robustness of the FSE-FWB relationship.

Path b (FSE $\rightarrow$ SB): Financial wellbeing significantly correlated with saving behaviour ($\beta = 0.2406$, $SE = 0.0064$, $t = 4.5672$, $p < 0.001$).

Total Effect (Path c'): The total effect of FSE on SB was significant ($\beta = 0.4149$, $SE = 0.0078$, $t = 8.2709$, $p < 0.001$) indicating a strong overall relationship before accounting for the mediator. The full model, including FSE and covariates, explained 28.97% of variance in SB.

The results in **Table 5** show the study's conditional process analysis using Hayes' (2018) process macro 4.6 (Model 4). The study tested the indirect path between financial knowledge and financial well-being via Saving behaviour ($a_1 \times b_1$). The study then used a bootstrapping approach to test for the mediation process, with confidence intervals resampled 5000 times at 95% CI.

Table 5. Mediation results.

Saving Behaviour	β	SE	t	p	LLCI	ULCI
Total effect of X on Y	0.4835	0.0076	9.9192	0.0000	0.0605	0.0904
Direct effect of X on Y	0.4149	0.0078	8.2709	0.0000	0.0493	0.0801
Indirect effect ($a_1 \times b_1$)	0.0686	0.0201			0.0333	0.1122

p -value = 0.000, LLCI = Lower-Level Confidence Interval, ULCI = Upper-Level Confidence Interval. Note: All covariates controlled. 5000 bootstrap samples. LLCI/ULCI = Lower/Upper Level Confidence Interval.

Direct Effect (Path c'): The direct effect remained significant ($\beta = 0.4149$, $SE = 0.0078$, 95% CI [0.0493, 0.0801]), confirming that FSE influences SB independently of FWB.

Indirect Effect (Path $a \times b$): The bootstrap analysis yielded a significant indirect effect of 0.0686 (BootSE = 0.0201, 95% BootCI [0.0333, 0.1122]). Since the confidence interval does not contain zero, mediation is statistically supported. The proportion mediated was approximately 14.20% (0.0686/0.4835), indicating that financial well-being accounts for more than 10% of the total effect of FSE on SB.

Hypothesis testing outcomes confirm that H1, H2, H3, and H4 are all supported. Financial self-efficacy positively influences financial well-being (H1), financial well-being positively predicts saving behaviour (H2), financial self-efficacy directly influences saving behaviour (H3), and financial well-being partially mediates the FSE-SB relationship (H4).

5. Discussion of the Results

5.1. Summary of Key Findings

This study investigated the direct and indirect relationships between financial self-efficacy, financial well-being, and saving behaviour among 350 working adults

across public universities in Western Kenya. The results yielded a clear and consistent pattern: financial self-efficacy significantly influenced both financial well-being and saving behaviour, with financial well-being serving as a partial psychological mediator. The total effect of FSE on SB ($\beta = 0.4835$) was substantial, with 14.20% of this effect channeled indirectly through enhanced financial well-being ($\beta = 0.0686$). The remaining 85.8% operated directly, confirming that FSE influences saving behaviour through both psychological security and independent behavioural mechanisms. All socio-demographic covariates (gender, age, education, job designation, work experience) failed to reach statistical significance, reinforcing the conclusion that psychological constructs exert stronger influence on financial outcomes than basic demographic profiles. These findings fundamentally challenge conventional assumptions that demographic characteristics reliably forecast financial confidence and behaviour, particularly in emerging economy academic workforces.

5.2. Interpretation of Path Effects and Mediation

H1: Financial Self-Efficacy and Financial Well-Being

Consistent with Social Cognitive Theory, FSE emerged as a powerful influencer of FWB ($\beta = 0.2853$, $p < 0.001$). This finding aligns with empirical research demonstrating that financial confidence reduces anxiety, enhances perceived control, and fosters positive financial appraisals (Bandura, 1997; Farrell et al., 2016; Chatterjee et al., 2011). In Kenyan university contexts, where institutional financial stressors are prevalent, FSE likely serves as a psychological buffer, enabling employees to maintain positive financial outlooks despite external economic constraints (Byarugaba et al., 2025; Dlamini & Dlamini, 2024). The strong association underscores the importance of cultivating financial confidence as a foundational element of workplace financial wellness programs.

H2: Financial Well-Being and Saving Behaviour

Financial well-being significantly shaped saving behaviour ($\beta = 0.2406$, $p < 0.001$), supporting Subjective Well-Being Theory's assertion that perceived financial security enhances cognitive bandwidth and promotes long-term planning (Diener et al., 2018; Kahneman, 2011; Strömbäck et al., 2017). Employees who feel financially secure are more likely to engage in disciplined saving habits, maintain emergency funds, and avoid impulsive spending, as perceived stability diminishes anxiety-driven financial decisions (Gutter & Copur, 2011; Chong et al., 2021; Rahman et al., 2021). This finding highlights FWB as a critical psychological catalyst for consistent financial action, particularly in volatile economic environments.

H3: Financial Self-Efficacy and Saving Behaviour

FSE demonstrated a significant direct effect on saving behaviour ($\beta = 0.4149$, $p = 0.005$), confirming Social Cognitive Theoretical proposition that self-efficacy directly influences behavioural outcomes through enhanced motivation and goal-directed action (Bandura, 1997; Lown, 2011; Mulasi & Mathew, 2021). Financially

confident individuals are more likely to set monetary goals, adhere to budgets, and maintain consistent saving habits, as self-belief translates into behavioural commitment (Chong et al., 2021; Sabri et al., 2020). This direct pathway suggests that FSE operates independently of perceived well-being, likely through habit formation, financial planning routines, and self-regulatory mechanisms.

H4: The Mediating Role of Financial Well-Being

The significant indirect effect (0.2406, 95% CI [0.0333, 0.1122]) confirms partial mediation, aligning with integrated SCT and SWBT frameworks. FSE enhances perceived financial security, which in turn promotes cognitive clarity, reduces present bias, and reinforces disciplined saving practices (Bandura, 1997; Diener et al., 2018; Strömbäck et al., 2017). The partial nature of mediation indicates that while FWB is a critical psychological bridge, FSE also directly drives saving behaviour through independent mechanisms such as self-control, financial literacy application, and behavioural habituation (Xiao & Porto, 2022; She et al., 2022; Chong et al., 2021). This dual-pathway model provides nuanced insights into how psychological confidence translates into tangible financial action.

As a caution to the findings, the authors noted that finding's is constrained by omission of critical structural variables. Independently, income level fundamentally dictates an employee's absolute capacity to save, meaning high financial self-efficacy cannot easily overcome severe income constraints or delayed salary disbursements common in Kenyan public universities. Secondly, household debt exerts distinct structural pressure; high debt-to-income ratios force individuals into reactive financial management, potentially neutralizing the positive behavioural effects of financial well-being on consistent saving habits. Finally, familial obligations introduce unique socio-cultural financial demands, such as supporting extended family members, which can rapidly drain disposable income regardless of an individual's psychological confidence. By omitting these three critical moderators, the study risks overstating its direct psychological pathways, as unmeasured financial realities may independently skew, confound, or suppress the observed relationships between self-efficacy, well-being, and actual saving behaviour among Kenyan university staff, limiting the model's generalizability.

5.3. The Role of Covariates

All socio-demographic covariates (gender, age, education, job designation, work experience) failed to reach statistical significance in both regression models, consistent with contemporary behavioural finance research demonstrating that psychological and structural factors dominate financial confidence and behaviour formation (Kahneman, 2011; Eberhardt et al., 2021; Strömbäck et al., 2017). This null finding challenges demographic determinism embedded in traditional economic models, supporting the proposition that financial self-efficacy and well-being are more function of psychological resilience, institutional support, and financial socialization than of chronological age, occupational rank, or educational attainment (Lusardi & Mitchell, 2014; Gennetian & Shafir, 2015; Rabinovich &

Webley, 2007). In Kenyan academia, where structural financial stressors and delayed promotions are common, demographic advantages may be neutralized, rendering psychological constructs more predictive of financial outcomes (Byarugaba et al., 2025; Dlamini & Dlamini, 2024).

6. Implications, Limitations, and Future Research

6.1. Theoretical Implications

The pattern of results carries substantial theoretical implications. First, the findings validate integrated Social Cognitive and Subjective Well-Being frameworks, demonstrating that financial self-efficacy operates through both direct behavioural pathways and indirect psychological mechanisms. Second, the partial mediation effect underscores the importance of distinguishing between confidence, perceived security, and actual financial behaviour in theoretical models of financial capability. Third, the negligible explanatory power of socio-demographic covariates challenges traditional demographic determinism, supporting behavioural economics' assertion that psychological, structural, and contextual factors dominate financial confidence formation (Kahneman, 2011; Thaler & Sunstein, 2008; Eberhardt et al., 2021). Future theoretical frameworks should integrate psychological mediators (self-control, future time orientation, financial socialization), structural moderators (income volatility, debt burden, institutional benefits), and behavioural nudges (automatic enrollment, default options, commitment devices) to explain financial behaviour variance more accurately (Rabinovich & Webley, 2007; Choung et al., 2023; Xiao & Porto, 2022). The study also underscores the need for culturally contextualized theories that account for emerging economy labour market dynamics, where traditional demographic assumptions may not hold (Byarugaba et al., 2025; Abdallah et al., 2025).

6.2. Practical and Policy Implications

The findings carry actionable implications for financial educators, university administrators, and national policymakers. First, universal financial wellness programs should replace demographically targeted interventions, as financial self-efficacy and well-being are not systematically associated with age, gender, rank, or experience. Workplace financial coaching, automated payroll deductions, and default retirement enrollment should be offered to all employees regardless of demographic profile (Thaler & Benartzi, 2004; Eberhardt et al., 2021). Second, Kenyan universities should institutionalize financial literacy programming that transcends academic qualifications, focusing on behavioural habit formation, mental accounting awareness, and emergency fund development (Lusardi & Mitchell, 2014; Xiao & Porto, 2022). Third, policymakers should prioritize structural reforms that stabilize income flows, enhance pension portability, and expand financial inclusion through digital savings platforms (FinAccess Household Survey, 2024; Ban et al., 2025). Finally, employer-sponsored financial counseling should be integrated into human resource frameworks, recognizing that financial confi-

dence and well-being directly impact job satisfaction, productivity, and institutional commitment (Bailey, 2019; Choi et al., 2020).

6.3. Limitations and Future Research Directions

Several limitations warrant acknowledgment. First, the cross-sectional design precludes causal inference; longitudinal tracking is required to determine whether FSE causally improves FWB and SB, or whether unmeasured variables explain both. Second, demographic variables were measured categorically, potentially reducing sensitivity to detect true effects; continuous measures (e.g., exact income, tenure in months) would enhance statistical power. Third, the study did not assess critical moderators such as income level, household debt, familial obligations, or objective financial literacy, which may confound psychological effects. Fourth, the sample was restricted to Kenyan public universities, limiting generalizability to private institutions, non-academic workforces, or other African contexts.

Future research should: 1) incorporate psychological measures (self-control, delay discounting, financial socialization) alongside demographics to determine relative predictive power; 2) employ longitudinal or experimental designs to establish causal pathways; 3) use continuous financial metrics and objective financial data to complement behavioural self-reports; 4) examine cross-cultural variations in psychological predictive utility; and 5) evaluate the efficacy of behavioural nudges such as automatic savings and goal-setting in university employee populations. By addressing these gaps, researchers can develop more precise theoretical models and evidence-based interventions that enhance financial capability across diverse socioeconomic contexts.

7. Conclusion

This study provides robust empirical evidence that financial self-efficacy significantly shapes saving behaviour among working adults in Kenyan public universities, with financial well-being serving as a partial psychological mediator. The total effect ($\beta = 0.4845$) was substantial, with 14.2% channeled indirectly through enhanced financial well-being ($\beta = 0.0686$) and 85.8% operating directly ($\beta = 0.4149$). All socio-demographic covariates failed to reach statistical significance, underscoring the dominance of psychological constructs over demographic profiles in shaping financial outcomes. These results challenge conventional assumptions that demographic characteristics reliably forecast financial confidence and behaviour, highlighting the critical role of psychological security, self-belief, and institutional support in emerging economy contexts. Researchers, practitioners, and policymakers should shift focus from demographic segmentation to universal, psychologically informed financial wellness interventions that address the root determinants of financial self-efficacy and well-being. By integrating behavioural nudges, structural reforms, and targeted counseling, Kenyan universities and national policymakers can foster resilient financial behaviours that enhance both individual welfare and institutional productivity.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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