

# Impact of Financial Behaviour on Financial Well-Being: Evidence among Working Adults in Ghana

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DOI: <https://doi.org/10.51244/IJRSI.2025.12120122>

Received: 19 December 2025; Accepted: 31 December 2025; Published: 16 January 2026

## ABSTRACT

**Purpose** – This paper is aimed at examining the effect of financial behaviour (FB) on financial well-being (FWB) among working adults in Ghana, focusing on how positive financial practices contribute to improved financial outcomes. This paper addressed a critical gap in FWB research by focusing specifically on working adults in Ghana, a demographic largely overlooked in existing literature that predominantly examines university students.

**Design/methodology/approach** – A quantitative research design was used, and data were collected from 444 working adults through a structured questionnaire. Descriptive statistics were analysed using SPSS version 28, and Structural Equation Modelling (SEM) was performed with AMOS software using 5,000 bootstrap samples to test the hypothesised relationships while controlling for demographic factors such as “gender, age, education, employment status, and monthly income”.

**Findings** – The results showed that all control variables had no significant effect on FWB: gender ( $\beta = -0.015$ ,  $p = 0.578$ ), age ( $\beta = 0.018$ ,  $p = 0.368$ ), education ( $\beta = 0.012$ ,  $p = 0.523$ ), employment status ( $\beta = -0.002$ ,  $p = 0.808$ ), and monthly income ( $\beta = -0.007$ ,  $p = 0.771$ ). However, FB had a strong and significant positive effect on FWB ( $\beta = 0.906$ ,  $p = 0.007$ ), indicating that better FB enhances FWB.

**Practical implications** – The study underscores the need for financial literacy and behavioural training among working adults in Ghana. Promoting positive financial habits such as budgeting, saving, and responsible spending can significantly improve individuals' financial stability and satisfaction. Within Ghana's unique socioeconomic context, characterised by high informal employment and limited social safety nets, these findings underscore the urgent need for behavioural interventions rather than income-focused programmes to enhance citizens' financial stability and satisfaction.

**Originality/value** – This study contributes to the limited empirical research on financial behavior (FB) and financial wellbeing (FWB) within the Ghanaian context, demonstrating that demographic factors play a minimal role compared to behavioural influences in determining FWB.

**Keywords:** Financial behaviour, financial well-being, Working adults, Ghana, Financial literacy.

## INTRODUCTION

Every individual has his or her aims in life. These aims or objectives differ from one another but in essence, they all lead to one thing, i.e., the attainment of well-being and success in their endeavours. Generally, well-being encompasses the spectrum of overall living quality which includes the level of income, job security, housing facilities, quality of living standard, healthcare access, education facilities, environment and social bonding, etc. (Hicks et al., 2013). This welfare or well-being can be included in various things such as health, education, and the most common is financial well-being (hereafter, FWB). FWB is an essential concern for individuals, societies as well as for various economies across the globe. FWB is one of the critical aspects of overall well-being (Centre for Disease Control and Planning, 2018).

The activity of managing finances satisfactorily is one of the important determinants of achieving one's success and financial well-being. The ever-changing nature of the financial ecosystem across the world has challenged the financial decision-making process of individuals. The responsibility to make important financial decisions on where to invest, save, and plan for retirement to improve on their FWB rests on the individual itself. Individuals possessing sound financial knowledge are better equipped to make informed decisions, thereby enhancing their families' economic well-being and contributing to overall economic growth (Lee et al., 2020). Notwithstanding the significance of financial knowledge in improving financial well-being (FWB), extant literature underscores the importance of examining additional behavioural factors influencing FWB (Consumer Financial Protection Bureau [CFPB], 2015).

According to a report by PricewaterhouseCoopers (PwC, 2019), financial issues are a significant source of distraction at work, with one-third of employees reporting such concerns. Furthermore, the report highlights that over 64% of millennials experience financial stress. Given the profound implications of poor financial wellbeing (FWB), understanding its determinants is crucial. An individual's FWB is influenced by various factors, including their financial behaviour (hereafter, FB), which encompasses the ability to manage financial resources, plan income, control finances, and engage in cash and credit management practices (Falahiti et al., 2012).

FB is intricately linked to spending, borrowing, and saving habits, and bad or wrong financial behaviours can precipitate a life time of social problems (Perry et al., 2005). FB involves strategies for achieving personal financial goals and encompasses practices such as calculated risk-taking, income allocation for contingencies, debt management, financial planning, avoidance of consumptive behaviours, and proactive seeking of financial information (Aristei & Gallo, 2021). Furthermore, FB is characterized by conscious behavioural patterns rooted in psychological factors, which inform financial decision-making (Santi & Supriadi, 2022). In research by Wangi and Baskara (2021), they acknowledged how the concept of financial behaviour (FB) encompasses psychological aspects in influencing financial decision-making processes. These researches suggest that, FB influences individual's approach to managing their financial resources and ultimately, increasing their FWB.

The occurrence of the COVID-19 pandemic and the Russian-Ukraine war precipitated widespread economic difficulties, resulting in the rise of unemployment situations across economies and exacerbating financial burdens globally. As economies strive to recover from these disruptions, it is imperative to scrutinize individual financial management behaviours to enhance financial well-being (FWB).

The recent surge in financial distress has seen an uptick in research aimed at examining and improving individual FWB, given its profound impact on various aspects of life. Existing studies on FWB have predominantly focused on university students (Lone et al., 2024; Abdullah et al., 2019; Pak et al., 2023; Sabri et al., 2023; She et al., 2023). Furthermore, research has highlighted the influence of locus of control on FWB and financial behaviour (FB) (Conell and Jamison, 2012; Furnham and Cheng, 2017; Ullah and Yusheng, 2020). Drever et al. (2015) emphasize the need for behavioural modifications to improve FWB, while Dholakia et al. (2016) advocate for promoting future-oriented financial behaviours. Additionally, Brügger et al. (2017) identify personal factors as crucial antecedents of individual FWB, highlighting the need for further research in this area.

These growing body of literature exploring financial well-being (FWB) and its determinants is predominantly focused on university students, Western economies and Asian economies, neglecting the peculiar socioeconomic phenomena of working adults in Sub-Saharan Africa's economies. This lack of studies on the FWB of working adults in Sub-Saharan Africa is significant, as this bloc is characterized by distinct challenges, including inflationary pressures, limited access to formal credit, and a prevalence of informal financial practices, which present a distinct set of constraints and opportunities for managing personal finances. Furthermore, there is a dearth of research examining the impact of financial behaviour on the FWB of working adults, representing a notable gap in the literature.

Addressing this research gap necessitates both empirical investigation and the development of theoretical frameworks that can effectively capture the complex interplay of cognitive and socio-cultural factors influencing financial well-being (FWB) among working adults. This study seeks to bridge this gap by examining the relationship between financial behaviours (FB) and FWB among working adults in Ghana, thereby responding to Xiao et al.'s (2014) call for a more nuanced understanding of personal finance in developing countries. By focusing on working adults, this research aims to provide a richer understanding of FB and FWB. The study is

grounded in cognitive development theory (Cartwright, 2001), which highlights the significance of financial actions in enhancing FWB.

The remainder of this paper is structured as follows: Section 2 reviews the relevant literature on FWB and FB, Section 3 presents the theoretical framework and hypotheses formulation, Section 4 describes the research methodology, Section 5 presents the data analysis and results, Section 6 discusses the findings, and Section 7 concludes the paper, outlining implications, limitations, and recommendations.

## LITERATURE REVIEW

### Financial Behaviour (FB)

Any behaviour within the various realms of the financial market can be included in the multifaceted concept of FB. Xiao (2008) defined FB as, “any human behaviour that is relevant to money management.” According to Saurabh et al. (2018), “FB refers to the handling of one’s income and financial situation, i.e. the orientation of the individual toward everyday financial matters. FB therefore means the ability of individuals to manage their finances to be successful in life.” FB is a blend of credit management, savings, investment and cash flow management. Reasonable financial management like budgeting and evaluating purchases and retirement purchases of debts in a good time. FB is also connected with the manner in which individuals treat, control, and utilize accessible funds. According to Arifin (2018), FB can be evaluated in a number of ways: (1) expenses, (2) paying bills, (3) financial planning, (4) giving money to yourself and family, (5) saving (Arifin, 2018).

According to Gudmunson and Danes (2011), FB is a pattern of time-related activities, including earning, saving, spending, and gifting. FB is any activity of a human being that is somehow related to money handling or habits. Jorgensen et al. (2017) described FB in the credit management, cash management, capital accumulation and general management areas. FB is the ability to summarize the total impact of financial decisions on oneself (i.e. community, person, family, country) and make decisions on how one can manage their cash appropriately, take precaution, and plan opportunities (Prasad, 2020). Another definition that was provided by Bailey and Global (2019) is that, FB are human actions that are in the management of credit, cash, and savings. One of the former research projects described that a healthy FB is indicative of certain good practices, including budgeting, paying bills punctually, cash flow management, spending plan, credit management as well as retirement planning (Kapoor et al., 2004). It has also been discovered in the past that positive FB is associated with improved FWB (Chong et al., 2021; Joo and Grable, 2004).

Financial literacy can motivate positive FB (Baptista and Dewi, 2021; Lajuni et al., 2018; Chong et al., 2021), including spending only on necessities (Farinella et al., 2017; Ibrahim et al., 2010), paying bills on time, saving and investing more, using credit cards in a smart way (Laily, 2014; Lusardi et al., 2010), proper retirement plan.

Additionally, Mian (2014) and Zulaihati et al. (2020) established that financial literacy may also have a positive implication on the FB.

Poor FB, in turn, causes financial distress and financial difficulties, including the lack of budget planning and over-accumulation of debt (Malaysian Financial Planning Council, 2016). Poor FB is a result of financial illiteracy that also involves behaviour on retirement planning, savings and retirement, stock market participation, decisions on investment, and behaviour on savings-investment (Agnew et al., 2013; Lusardi and Mitchell, 2007; Bateman et al., 2010; Van Rooij et al., 2011; Hassan Al-Tamimi and Anood Bin Kalli, 2009; Bhabha et al., 2014). Again, negative or bad FB can also generate financial problems on a regular basis; although poor financial knowledge is also a major reason (Sabri et al., 2020a; Lusardi and Tufano, 2015). Financial illiteracy could contribute to FB problems (Idris et al., 2013), including retirement planning, income management, savings and contingency planning of individuals, which ultimately has an impact on their FWB (Sabri et al., 2020a).

FB comprises more general notions in a broader perspective such as investment behaviour in the short- and longterm, credit utilisation, savings behaviour, expenditure behaviour, and so on (Garman et al. 2014). According to Brubbe et al. (2019), FB directly impacts FWB. On the same note, Joo and Grable (2004) assume that FB is directly and indirectly linked to FWB. As an example, the personal dimension of financial concept is related to financial management methods (Walczak et al. 2018) and their financial satisfaction (Bashir et. al. 2013).

Conversely, Osman et al. (2020) studied the federal territory of Labuan in Malaysia and found that there was no noticeable interrelation between the FB and the FWB. The results of research conducted by Joo et al. (2004), shows that FB has positive effect on financial satisfaction. These findings broadly establish FB as having a positive influence on FWB.

### **Financial Well-being (FWB)**

Various several academic circles have deliberated the theory of FWB such as financial counselling and planning, consumer decision-making, economics and developmental psychology. But there is still no single measure or definition that is generally accepted yet and there is not much clarity regarding its concept and components. Drever et al. (2015) define FWB as money management skills, financial uncertainty, and financial objectives and freedom to make a decision to enable them to live the good life. Meanwhile, Consumer Financial Protection Bureau (2015) defines FWB as a state of being where one is able to fully satisfy current and continuing financial obligations, is not worried about their future financial and is able to make decisions on behalf of them to live. In the meantime, Shim et al. (2009) gave a brief description of FWB as the general satisfaction of people with their financial state. Other social scientists define FWB through both objective and subjective approaches to it and other ones through only one. As an example, Danes and Yang (2014) described FWB through objective method and Shim et al. (2009) and Joo (2008) employed a subjective method. Nevertheless, previous sources show that subjective method is more holistic and can be extended to non-financial variables, which is why it can be necessary to define and evaluate a complex and individual phenomenon of FWB (Brueggen et al., 2017).

An individual's state of FWB arises from a compilation of factors, including their self-perception of having the autonomy to make sound decisions, behaviours they undertake, objective values of their net worth, and their self-assessment of current positions and future expectations. Each of these closely related categories contributes in a unique way to FWB. Accordingly, there are many alternative ways to assess the theory of FWB, including surveys of individual perceptions (e.g., financial satisfaction or stress), objective outcomes indicative of FWB (e.g., wealth accumulation), behaviours influencing FWB (e.g., budgeting), and metrics representing composite scores across different dimensions of FWB. Promoting improvements in FWB requires detailed understanding of factors contributing to its variety of measures. Netemeyer et al. (2018) develop two related composite measures separated by time dimensions. Other examples include the Financial Health score (Garon et al., 2021) and Fidelity's Financial Wellness Score (Fidelity, 2020). A common thread across definitions is that to achieve a sense of FWB, an individual maintains some level of consideration over intertemporal trade-offs.

The latest research that has conceptualised the word FWB explains the concept as a feeling that one can maintain the current and expected desired living conditions and financial autonomy (Bruegen et al., 2017, p. 4). According to Netemeyer et al. (2017), it is possible to single out two dimensions, such as current money management stress and future financial security. D'Agostino et al. (2020) indicate that FWB can be described using five dimensions and these dimensions are inner well-being, relative assessment, time dimension, financial security and financial freedom.

The FWB of young adults does not only affect their psychological wellbeing but also affects their level of life satisfaction, academic achievements and performance at work (Shim et al., 2009; Pandey et al., 2020). Ineffective financial status of adults in their early years can adversely affect their life wellbeing, interpersonal and family relationships and their chances of successful transition into the following life stage, in the long run (Shim et al., 2009). In the meantime, FWB is highly dependent on socio-economic factors (Prawitz and Cohart,

2016; Brueggen et al., 2017). In their research, Furnham and Cheng (2017) discovered that gender, social class, intelligence level, Locus of control, educational level and occupational status are important in influencing the FWB among young adults.

The survey conducted by Pandey et al. (2020) also showed that a significant proportion of young adults were experiencing low FWB, struggled to control their monthly expenditure, were lacking financial skills and not satisfied with their financial states. But those who engaged in a dialogue and consulted other people on efficient money expenditure behaviour, saving prowess, budgeting and investing. Conversely, they were more prone to positively perceive money and improve their FB on saving, spending and tracing expenses leading to better anticipated FWB (Pandey et al., 2020). Moreover, young adults whose parents and elder generation follow the

patterns of healthy financial habits will have greater FB and FWB and are more likely to achieve their financial goal (Ullah and Yusheng, 2020). People that constantly talk and follow up on their parents on how they make financial decisions will empower their own FWB indirectly.

In order to achieve FWB, one should have future financial stability in the form of savings, insurance, and investments (Yolanda and Rembulan, 2017). According to Ratnawati et al. (2022), well-being is achieved when material, spiritual, and even social needs of citizens are fulfilled, which allows citizens to live decently, develop themselves, and carry out their social functions. FWB is one of the main aspects of the general wellbeing of an individual. Through FWB we do not mean the level of monetary asset that person possesses, in the same way as the social wellbeing does not correspond to the numbers of their relationships. Their number of relationships is not what is important but the quality thereof. The same can be said about the quality of his or her financial position: not only do more or less money can help him or her satisfy his or her values, but does the finances of a person allow him or her to prosecute meaningful goals, nourish close relationships and live long and healthy?

The FWB surveys carried out in different countries show that a significant portion of the workforce is increasingly worried about their present and further economic well-being. The surveys also provide a clear indication of how a financial strain has become a distraction in the workplace. As an illustration, the 2021 PwC Employee Financial Wellness Survey reveals that 72% of the millennials reported having an increased financial pressure because of the pandemic, among them 45% were in agreement that it has lowered the level of productivity. The survey also revealed that 72 per cent were attracted to those companies that were more concerned about their FWB.

These findings highlight the significance of FWB. Nevertheless, there is a lack of research examining the specific impact of financial behaviour on the FWB of working adults in sub-Saharan African contexts, particularly in Ghana, despite the country's recent economic and financial sector developments. Bridging this research gap is essential for enhancing the financial capabilities of Ghanaian working adults and promoting responsible financial behaviours.

## **THEORETICAL FRAMEWORK AND HYPOTHESES FORMULATION**

We make a proposition that FB plays a significant role in impacting FWB via cognitive pathways. In explaining this pathway, we employ a theoretical framework that offer a distinct lens through which the FB-FWB nexus can be revealed: the Cognitive Development Theory (Piaget, 1952).

### **Cognitive Development Theory**

Jean Piaget proposed a theory that examines how individuals build financial knowledge and comprehension of the world through their experiences (Barrouillet, 2015). This theory highlights the significant shifts in thinking that happen as individuals progress through various stages of development. These stages, characterized by distinct cognitive skills and ways of grasping the world, include sensorimotor, concrete operational, preoperational, and formal operational (Piaget, 1952 as cited by Bamicha and Drigas, 2022).

Cognitive development theory suggests that individuals' cognitive abilities and ways of thinking evolve over time, influencing their behaviours (Lind, 2023). For instance, adults in the formal operational stage are capable of abstract thinking and hypothetical reasoning, which may shape their financial attitude and beliefs differently from those in earlier stages. FB is crucial in understanding how cognitive development theory relates to FWB among working adults.

According to cognitive development theory, as individual's progress through different cognitive stages, their FB and decision-making processes evolve. For instance, adults in the formal operational stage may exhibit more rational and strategic FB, considering long-term consequences and financial planning (Constantino et al., 2021). The relevance of cognitive development theory in the context of FWB among working adults lies in its explanatory power regarding the developmental trajectory of FB and attitudes. Cognitive development theory provides a framework for understanding how cognitive abilities evolve over time and influence FB, and ultimately, FWB among working adults. Understanding how cognitive abilities and thought processes develop can inform interventions aimed at promoting healthier FB and enhancing FWB among adults.

### **Financial Behavior on FWB**

According to Sabri et al. (2020), regular budgeting and saving practices are associated with greater financial

security and overall well-being. Research by Hashmi et al. (2021) indicates that strong spending self-control leads to better financial outcomes and improved well-being. In 2021, a study by Chong et al. found that those who seek financial education resources exhibit positive FWB and experience greater overall well-being. Fu (2020) concluded that, individuals who set specific financial goals are more likely to achieve them and experience greater FWB. The above studies show one thing; i.e. good financial behaviors have a positive impact on financial wellbeing.

Conversely, She et al., (2021) found that impulse buying behaviors are linked to financial strain and a negative impact on overall well-being. Additionally, Sarofim et al. (2020) found that risky investment behaviors are more likely to lead to negative financial consequences and decreased well-being. Also, in 2021, a study by Friedline et al. suggested a connection between high household debt and decreased well-being due to stress. Rahman et al., (2021) suggested a link between financial stress and negative FWB, ultimately impacting well-being. These researches align with the broader view of bad financial practices having a negative impact on financial wellbeing and ultimately overall wellbeing of individuals.

There are also many studies on FWB, and on FB, which have investigated the nature of young or emerging adults. Some of them casually employed university students in the sample (e.g., Falahati et al., 2012; Shim et al., 2009; Lanz et al., 2020), but others employed young working adults within a specific age group as respondents (e.g., Topa et al., 2018; Arifin et al., 2018; Yong et al., 2018). The emphasis on youths and young adults has remained a research topic among scholars because this category of the population is relevant in society, as they are future leaders who are exposed to the world and are expected to thrive in the midst of **complex** global situations.

Other literature also demonstrates that income is a significant predictor of financial health, perceived FWB and FB (e.g., Bonke and Browning, 2009; Cummins, 2000; Mahdzan et al., 2019; Mokhtar and Rahim, 2016), which is reflected in the results of various studies in various settings, such as in America (Netemeyer et al., 2018; Malone et al., 2010), China (Chen and Lemieux). FB and perceived FWB of people are also correlated with socio-economic factors, including the level of education (Mokhtar and Husniyah, 2017; Shusha, 2016; Zaimah, 2019; Mahdzan et al., 2019; Chauhan and Dhami, 2021). Past evidence has depicted that FB and FWB are dependent on the level of education and the monthly income (Shusha, 2016), the rationale behind this is that higher levels of income and education lead to better FB and perceived FWB. Based on the literature, it was discovered that scholars have devoted attention to the financial aspects of vulnerable groups of society especially low-income households (e.g., Hung, 2020; Loibl, 2017; Magli et al., 2021). Nevertheless, the number of studies that focus on a particular group, i.e., the working adults in Ghana, seems to be extremely low.

It is therefore believed that FB may have had a favourable impact on Ghanaian working adults. This discussion leads to the following hypothesis for this study:

**H1. Financial behaviour has a positive effect on financial well-being.**

## METHODOLOGY

### Design and sample

This research used a cross-sectional and questionnaire-based research to determine the relationship between FB and Financial Well Begin among working adults. Accessibility and willingness to participate in the survey were considered when the participants of the study were chosen, provided, they meet the criteria related to the target population. The self-administered online questionnaire was given out to Ghanaian working adults using a nonprobability sampling technique, notably convenience sampling to select participants. Instead of employing a randomised selection procedure, this approach chooses people who are readily available and eager to take part in the study (Etikan et al., 2016). Convenience sampling, whilst facilitating accessibility to working adults across diverse employment sectors, inherently limits generalisability and introduces potential selection bias (Doebel & Frank, 2024; Lines et al., 2022). However, this non-probability approach was necessitated by the absence of a comprehensive sampling frame for Ghana's working adult population, particularly given the substantial informal sector representation. The questionnaire comprised three sections (appendix 1): Section A: collected demographic details such as gender, age, and educational background, Sections B: FB, and Section C: FWB.

A total of 444 working adults participated through social media platforms like WhatsApp, Facebook, and

LinkedIn. The target of the study was working adults with both full-time and part-time jobs in Ghana. Google Forms link was distributed to the above social media platforms, to ensure flexibility for respondents to complete it at their convenience within specified deadlines. Data collection adhered to ethical guidelines, protecting participants' rights and confidentiality throughout the survey period, which spanned from April to May 2024.

Determining the right sample size is crucial for any study. This research followed Yamane's (1967) formula to calculate the appropriate sample size, ensuring confidence in the study's findings and conclusions. This approach helps enhance the reliability of the results as the study adheres to systematic and empirical methods for determining the sample size.

### Measurement of Instrument

Table 1 indicates the descriptions and comprehensive measurements of the independent and control variables.

**Table 1: Variable descriptions**

Variable	Description	Constructs	Code	Scale	Source
<b>Independent</b>	FINANCIAL BEHAVIOUR	Financial Behaviour	FB	Likert Scale -5 point	Dew & Xiao (2011)
<b>Dependent</b>	FINANCIAL WELL-BEING	Financial WellBeing	FWB	Likert Scale -5 point	Prawitz et al. (2006).
<b>Control</b>	DEMOGRAPHICS CHARACTERISTICS	Gender			
		Age			
		Education level			
		Marital Status			
		Income			

The demographic control variables were theoretically selected based on established financial well-being literature. Gender was included following research indicating potential disparities in financial outcomes (Robson & Peetz, 2020; Mahdzan et al., 2023). Age represents cognitive maturity stages within development theory (Arnett & Mitra, 2020; Ramesh, 2022). Education level reflects human capital theory's predictions regarding financial capability (Deming, 2022; Thomas & Gupta, 2021). Employment status captures income stability dimensions, whilst monthly income directly measures economic resources (Morrissey et al., 2020; Prieto, 2022). These controls enable isolation of FB's unique contribution beyond socio-demographic confounds, strengthening causal inference within the cross-sectional design's inherent limitations.

### Ethical Considerations

Ethical procedures were rigorously observed. The relevant academic departments granted permission to carry out the study. Participants were fully told about the goal of the study and that they might leave at any time without facing any repercussions. Written consent was received from all respondents prior to participation. Data were collected and reported honestly without fabrication or falsification. Responses were anonymised to protect identity and stored securely with access limited to the researcher. Participation was voluntary, and no incentives were used to influence involvement. Cultural and social norms were respected throughout the data collection process. Special care ensured that no vulnerable individuals were pressured to participate. These measures collectively upheld academic integrity and the rights and dignity of participants.

## DATA ANALYSIS AND RESULTS

### Demographic Characteristics

The demographic results in Table 2 shows that out of 444 respondents, 58.11% were male while 41.89% were female, indicating that men formed the majority of the participants. In terms of age, most respondents were

between 25 and 44 years (47.97%), followed by those above 60 years (23.19%), 45–60 years (16.44%), and 18–24 years (12.38%). Regarding educational background, 47.97% held a bachelor’s degree, 16.67% had a diploma or HND, 15.31% completed BECE/WAEC/A’ Level, 14.41% had a master’s degree, and 5.63% were chartered professionals. Concerning employment status, 68.47% were self-employed, while 31.53% were employed. For monthly income, 27.25% earned between GH¢4,000–GH¢6,000, 23.42% earned between GH¢8,001–GH¢10,000, and 15.99% earned between GH¢6,001–GH¢8,000. Meanwhile, 13.96% earned above GH¢15,000, 11.71% earned less than GH¢4,000, 5.18% earned between GH¢12,001–GH¢15,000, and 2.47% earned between GH¢10,001–GH¢12,000. This shows that most respondents were self-employed, middle-aged, and held a bachelor’s degree, with moderate income levels.

**Table 2: Demographic Results**

Demographic Characteristics	Frequency	Percent
Gender		
Female	186	41.89
Male	258	58.11
Age		
18 - 24 years	55	12.38
25 - 44 years	213	47.97
45 - 60 years	73	16.44
Above 60 years	103	23.19
Educational Background		
Bachelor’s degree	213	47.97
BECE/WAEC/O’ Level/A’ Level	68	15.31
Chartered	25	5.63
Diploma/HND	74	16.67
Master’s Degree	64	14.41
Employment Status		
Employed	140	31.53
Self-Employed	304	68.47
Monthly Income		
Above GH¢15,000	62	13.96
GH¢12,001 - GH¢ 15,000	23	5.18
GH¢10,001 - GH¢12,000	11	2.47
GH¢8,001 - GH 10,000	104	23.42
GH¢6,001 - GH¢8,000	71	15.99

GH¢4,000 - GH¢6,000	121	27.25
Less than GH¢4,000	52	11.71
<b>Total</b>	<b>444</b>	<b>100.0</b>

Source: Author’s Analysis Outcome (2025)

### Descriptive Statistics and Normality Test

Descriptive statistics summarize data through central tendency (mean (M)) and spread (standard deviation (SD)), while normality tests using skewness and kurtosis assess whether data approximates a bell-shaped distribution (Mishra et al., 2019; Hatem et al., 2022). Table 3 shows the descriptive statistics and normality results for FB and FWB. The mean scores are M = 5.39 and M = 5.25, showing that respondents generally agreed with the statements on both variables. The standard deviations (SD = 1.510 and 1.357) indicate moderate variation in responses. Skewness values (−0.170 and −0.125) are negative but within ±2, and kurtosis values (0.072 and 0.071) are within ±7, suggesting the data are approximately normally distributed and suitable for further analysis.

**Table 3: Descriptive statistics and Normality Test**

Variable	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Financial Behaviour	5.39	1.510	-0.170	0.122	0.072	0.243
Financial Well-Being	5.25	1.357	-0.125	0.122	0.071	0.243

Source: Author’s Analysis Outcome (2025)

### Model Estimation

#### Reliability and Validity

Reliability ensures that each construct produces consistent results, while convergent validity confirms that the items truly measure the intended concept (Hair et al., 2017; Fornell & Larcker, 1981). In covariance-based SEM, acceptable values are item loadings  $\geq 0.70$ , Cronbach’s  $\alpha$  (CA) and Composite Reliability (CR)  $\geq 0.70$ , and Average Variance Extracted (AVE)  $\geq 0.50$  (Hair et al., 2020; Kraus et al., 2020). Table 4 presents the reliability and validity results for FB and FWB. All item loadings (0.708–0.913) are above 0.70, showing strong indicator reliability. FB recorded Cronbach’s  $\alpha$  (CA) = 0.962, Composite Reliability (CR) = 0.962, and Average Variance Extracted (AVE) = 0.782, while FB showed CA = 0.950, CR = 0.950, and AVE = 0.674. Since all CA and CR values exceed 0.70 and AVE values are above 0.50, both constructs demonstrate excellent internal consistency and convergent validity.

**Table 4: Reliability and Validity**

Item	Financial Behaviour	Financial Well-Being
FB1	0.879	
FB2	0.875	
FB3	0.892	
FB4	0.913	
FB5	0.889	

FB6	0.883	
FB7	0.859	
FWB1		0.807
FWB2		0.911
FWB3		0.855
FWB4		0.894
FWB5		0.877
FWB6		0.811
FWB7		0.765
FWB8		0.737
FWB9		0.708
Cronbach's $\alpha$ (CA)	<b>0.962</b>	<b>0.950</b>
Composite Reliability (CR)	<b>0.962</b>	<b>0.950</b>
Average Variance Extracted (AVE)	<b>0.782</b>	<b>0.674</b>

Source: Author's Analysis Outcome (2025)

### Discriminant Validity and Collinearity Statistics

Discriminant validity checks that each construct captures unique variance, distinct from other constructs usually evaluated using Fornell–Larcker criterion (Fornell & Larcker, 1981; Henseler et al., 2015). This method compares each construct's square root of AVE (diagonal values) with its correlations ( $r$ ) with other constructs: discriminant validity holds if  $\sqrt{AVE} > r$  for all pairs. Collinearity statistics, on the other hand, check if predictors are not too closely related by examining tolerance and VIF values, where tolerance  $> 0.10$  and VIF  $< 10$  indicate no multicollinearity issues (Hair et al., 2017; Kock & Lynn, 2012; Sarstedt et al., 2019). Table 5 presents the results of discriminant validity and collinearity statistics. The square roots of AVE ( $\sqrt{AVE}$ ) for FB = 0.884 and FWB = 0.821 are both greater than their inter-correlation ( $r = 0.806$ ), confirming discriminant validity ( $\sqrt{AVE} > r$ ). Collinearity results also show tolerance = 1.000 and VIF = 1.000, which meet the acceptable thresholds (tolerance  $> 0.10$ ; VIF  $< 10$ ), indicating no multicollinearity problems among the constructs.

Common method bias represents a potential threat given the self-reported nature of all constructs. Harman's single-factor test was conducted, whereby all items were loaded onto one common factor through exploratory factor analysis. According to the unrotated solution, common technique bias was not a widespread issue because the first factor explained 41.3% of the total variance, which was much less than the 50% threshold (Podsakoff et al., 2003). Additionally, procedural remedies were implemented during data collection, including guaranteeing respondent anonymity, randomising item sequences, and employing different scale formats across constructs to reduce method artefacts.

Table 5: Fornell-Larcker criterion, Intercorrelation and Collinearity Statistics

Variable	FB	FWB	Tolerance	VIF
Financial Behaviour	<b>0.884</b>		1.000	1.000
Financial Well-Being	.806**	<b>0.821</b>		

Source: Author's Analysis Outcome (2025)

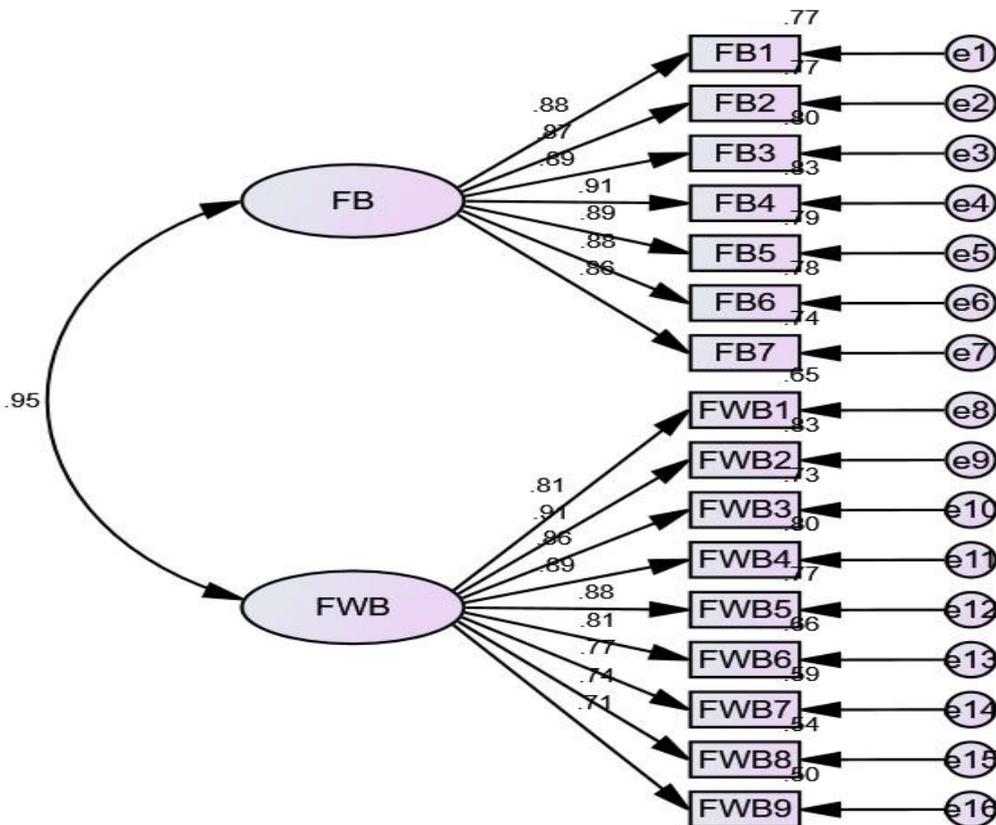
**Model Fitness Indices**

Model fitness indices assess how well the data match the proposed model (Hu & Bentler, 1999; Kline, 2016; Hair et al., 2019). In Table 6, the chi-square value (CMIN = 191.864, df = 87) with a ratio (CMIN/DF = 2.205) comfortably below 3 indicates a well-fitting model. The goodness-of-fit indicators GFI = 0.921, NFI = 0.949, RFI = 0.938, IFI = 0.971, TLI = 0.965, and CFI = 0.971 all exceed the 0.90 threshold, signalling that the model mirrors the observed data remarkably well. Meanwhile, the SRMR = 0.025 and RMSEA = 0.056, both below the recommended 0.08, confirm a fine-tuned and reliable structure.

**Table 6: Model fitness indices**

	Estimated model	Threshold
CMIN	191.864	
df	87	
CMIN/DF	2.205	< 3
GFI	0.921	> 0.9
NFI	0.949	> 0.9
RFI	0.938	> 0.9
IFI	0.971	> 0.9
TLI	0.965	> 0.9
CFI	0.971	> 0.9
SRMR	0.025	< 0.08
RMSEA	0.056	< 0.08

Source: Author’s Analysis Outcome (2025)



Note(s): FB – Financial Behaviour; FWB – Financial Well-Being.

**Figure 1: Measurement Model**

### Coefficient of determination (R<sup>2</sup>)

The coefficient of determination (R<sup>2</sup>) shows how much of the change in a dependent variable is explained by its predictors. In Table 7, the R<sup>2</sup> value for FWB is 0.822, meaning that 82.2% of the variation in FWB is explained by the model. This indicates strong explanatory power because R<sup>2</sup> > 0.70 is regarded as substantial in social science studies (Ozili, 2023; Alhyari, 2016; Henseler et al., 2015).

**Table 7: Coefficients of Determination**

Construct	R-square
Financial Well-Being	0.822

### Source: Author’s Analysis Outcome (2025)

#### Structural Equation Model (SEM) Test

After the measurement model's validity and reliability were established, the structural model results were examined. Path coefficients ( $\beta$ ), t-values, and p-values were used to test hypotheses after bootstrapping with 5,000 subsamples. In order to address any breaches of multivariate normality assumptions inherent in maximum likelihood estimation, bootstrapping with 5,000 resamples was used to construct robust standard errors and confidence intervals (Nevitt and Hancock, 2001). This resampling approach provides more accurate parameter estimates and hypothesis tests, particularly with moderate sample sizes, by empirically deriving sampling distributions rather than relying on asymptotic theory (Preacher & Hayes, 2008). The 5,000-iteration threshold exceeds methodological recommendations suggesting 2,000–5,000 bootstrap samples for stable estimates (Hair et al., 2017), ensuring statistical precision in path coefficient estimation and significance testing.

A path is considered significant when  $p < 0.05$  and  $t \geq \pm 1.96$ . The regression results in Table 8 were analysed using AMOS. Covariance-based structural equation modelling (CB-SEM) using AMOS was selected over others for theoretical and statistical reasons. CB-SEM provides superior model fit assessment through multiple indices, enables theory testing rather than mere prediction, and offers more rigorous handling of measurement error (Hair et al., 2017). Given the confirmatory research objective and established theoretical framework, CB-SEM's assumption-based approach was methodologically appropriate, despite requiring larger sample sizes and multivariate normality.

Table 8 presents the results of the structural equation model (SEM) analysis. All control variables had no significant effect on FWB: gender ( $\beta = -0.015$ ,  $p = 0.578$ ), age ( $\beta = 0.018$ ,  $p = 0.368$ ), education ( $\beta = 0.012$ ,  $p = 0.523$ ), employment status ( $\beta = -0.002$ ,  $p = 0.808$ ), and monthly income ( $\beta = -0.007$ ,  $p = 0.771$ ). These results suggest that within the Ghanaian working adult population, behavioural factors supersede demographic characteristics in determining financial outcomes, contradicting traditional economic models emphasising sociodemographic determinants. For the main hypothesis, FB had a strong and significant positive effect on FWB ( $\beta = 0.906$ ,  $p = 0.007$ ), confirming that better FB improves FB, while demographic factors show no meaningful impact.

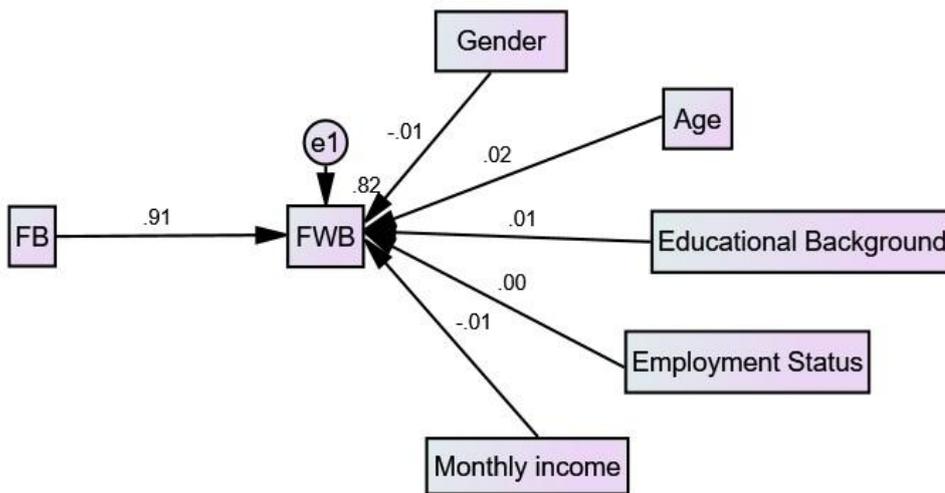
**Table 8: Results of hypothesis testing**

Path	Estimate	S.E.	C.R.	P	Lower Bounds (BC)	Upper Bounds (BC)	Decision
<b>Control Effects</b>							
FWB <--- Gender	-0.015	0.020	-0.350	0.578	-0.049	0.026	Not Supported

FWB <--- Age	0.018	0.023	0.783	0.368	-0.018	0.062	Not Supported
FWB <--- Education	0.012	0.023	0.522	0.523	-0.024	0.051	Not Supported
FWB <--- Employment Status	-0.002	0.024	-0.731	0.808	-0.043	0.034	Not Supported
FWB <--- Monthly income	-0.007	0.021	-1.480	0.771	-0.043	0.026	Not Supported
<b>Direct Effects</b>							
FWB <--- FB	0.906	0.013	69.692	0.007	0.884	0.927	Supported

Note(s): FB – Financial Behaviour; FWB – Financial Well-Being.

Source: Author’s Analysis Outcome (2025)



Note(s): FB – Financial Behaviour; FWB – Financial Well-Being.

Figure 2: Structural Equation Model

### DISCUSSION OF FINDINGS

This study examined the effect of FB on FWB amongst working adults in Ghana, grounded in Cognitive Development Theory. The findings revealed that FB exerted a robust positive influence on FWB ( $\beta = 0.906$ ,  $p = 0.007$ ), explaining 82.2% of the variance. This result aligns with multiple empirical investigations demonstrating that individuals who engage in prudent financial practices, including budgeting, saving, and responsible spending, experience enhanced FWB (Sabri et al., 2023; She et al., 2022; Ghazali et al., 2022). The substantial effect size corroborates the assertion that behavioural factors supersede demographic characteristics in determining financial outcomes (Castro-González et al., 2020; Rai et al., 2025). Through the lens of Cognitive Development Theory, this relationship suggests that cognitive processes underpinning financial decision-making such as planning, self-regulation, and goal-setting are instrumental in fostering positive FWB (Hasan et al., 2025; Kusumawati et al., 2024). Cognitive Development Theory links formal operational thinking to adults’ FB. Abstract reasoning enables budgeting, opportunity cost evaluation, and future projections. While cognitive maturity underpins capability, well-being ( $\beta = 0.906$ ) depends on translating these abilities into consistent financial practices, highlighting behaviour as the proximate mechanism for financial outcomes.

Interestingly, all demographic control variables, “gender, age, education, employment status, and monthly income”, demonstrated no significant relationship with FWB. The non-significant effect of gender ( $\beta = -0.015$ ,  $p = 0.578$ ) contradicts certain studies suggesting gender disparities in financial outcomes but supports research indicating that behavioural competencies transcend gender differences (Mansor et al., 2022; Mahdzan et al., 2023). Similarly, age ( $\beta = 0.018$ ,  $p = 0.368$ ) showed no meaningful association, diverging from research that posits age-related variations in financial maturity (She et al., 2024; Ullah & Yusheng, 2020). The insignificant impact of educational attainment ( $\beta = 0.012$ ,  $p = 0.523$ ) challenges conventional assumptions that higher education automatically translates to superior FWB, consistent with findings that actual FB matters more than educational credentials (Sam et al., 2022; Rafien et al., 2022). Contradictory results manifest, particularly on education and income, which do not guarantee FB. In Ghana, limited financial education means even educated adults may lack practical skills. Income’s non-significance highlights that disciplined behaviours, not earning capacity, drive outcomes, echoing evidence that knowledge or wealth without application can still lead to financial distress.

The lack of association between employment status ( $\beta = -0.002$ ,  $p = 0.808$ ) and monthly income ( $\beta = -0.007$ ,  $p = 0.771$ ) with FWB warrants particular attention. These results contradict traditional economic perspectives emphasising income as a primary determinant of financial wellness but align with contemporary research highlighting that income alone insufficient guarantees FWB without accompanying responsible FB (Fatuohman et al., 2024; Mahendru et al., 2022). This finding reinforces the cognitive-behavioural perspective that individuals’ financial management competencies, rather than their earning capacity or employment type, predominantly shape their FWB (Garg et al., 2024; Saeedi & Nishad, 2024). The results suggest that within the Ghanaian context, how individuals manage their financial resources supersedes the quantum of resources available, emphasising the psychological and behavioural dimensions over purely economic factors (AssifuahNunoo & Yeboah, 2024; Nanda & Banerjee, 2021).

## CONCLUSION

This investigation established that FB constitutes the paramount determinant of FWB amongst Ghanaian working adults, with demographic factors exerting negligible influence. The exceptionally strong relationship underscores that positive financial practices, including systematic budgeting, disciplined saving, and prudent expenditure management, are fundamental to achieving optimal FWB. The findings challenge prevailing assumptions regarding the primacy of income, education, or employment status in determining financial outcomes. Instead, the evidence supports a behavioural paradigm wherein cognitive financial competencies and their practical application emerge as critical success factors. The high explanatory power demonstrates that FB captures the essential mechanisms through which individuals attain financial security and satisfaction, irrespective of their demographic profiles. These conclusions align with contemporary FWB literature emphasising psychological and behavioural dimensions over traditional economic indicators. For Ghanaian working adults, cultivating sound FBs appears more consequential than increasing income levels or enhancing formal educational qualifications, suggesting that policy interventions should prioritise behavioural modification strategies over purely income-focused programmes.

This study’s contribution to literature lies in positioning FB not as the only influence but as part of a wider cognitive and behavioral framework to understanding the relationship between FB, and FWB among working adults in Ghana. Cognitive development theory, which focuses on the progression of cognitive abilities and understanding, provides a valuable lens through which to analyze how financial attitudes and behaviors evolve and impact financial outcomes. The study emphasizes the cognitive aspect of financial self-assessment, where individuals evaluate their own financial knowledge and apply it to real-life scenarios. This self-perception and utilization of financial knowledge reflect the stages of cognitive development described in the theory, wherein individuals continually refine their ability to comprehend and manage financial information. The study’s exploration of FB on FWB extends cognitive development theory by illustrating the pathway through which cognitive beliefs are translated into practical outcomes. This highlights the importance of developing practical financial skills alongside cognitive beliefs to achieve better financial outcomes, thereby enriching the application of cognitive development theory to FB and FWB.

## Managerial implications

The findings present actionable insights for financial institutions, employers, and governmental agencies operating within Ghana’s economic landscape.

## Financial Institutions

Banks, microfinance providers, and especially Ghana's Rural and Community Banks network—serving 7.8 million customers in underserved regions—should recalibrate customer engagement beyond product promotion or credit expansion. Mobile-based platforms, already widely adopted through mobile money usage by 58% of adults, offer scalable avenues for personalised financial coaching, behavioural nudges, and expenditure tracking tools. Such interventions align with the Bank of Ghana's National Financial Literacy and Consumer Protection Strategy (2020–2024), which emphasises community-based behavioural education.

## Employers

Employers across formal and informal sectors should integrate financial wellness programmes into employee benefit structures, recognising the direct link between FB and productivity. Workplace initiatives could include automated savings schemes, peer learning communities, and behavioural nudges embedded in payroll systems. These measures reinforce positive habits and mirror the National Pensions Regulatory Authority's autoenrolment reforms, which exemplify behaviourally informed policy design.

## Government

Government agencies must recalibrate poverty alleviation strategies from income supplementation towards comprehensive capability-building programmes. The Ministry of Finance's Financial Sector Development Implementation Plan provides a framework for embedding practical financial management training across educational curricula, ensuring early development of robust FBs. Regulators should further mandate transparent, behaviourally informed financial products that facilitate sustainable practices, protecting consumers while promoting FB. Such measures are particularly critical within Ghana's informal economy, which accounts for 86% of employment, where behavioural modification offers the most sustainable pathway to improved outcomes.

## Theoretical implications

This study advances FWB theory by extending behavioural economics, particularly prospect theory (Kahneman & Tversky, 1979), into developing economy contexts. Prospect theory's heuristics, loss aversion, reference dependence, and mental accounting, manifest in observable FBs such as budgeting, saving, and expenditure management. The exceptionally strong behaviour–well-being relationship demonstrates that mastery of these behavioural adaptations yields superior outcomes irrespective of demographic profiles, thereby supporting bounded rationality perspectives over traditional rational actor models.

The negligible effects of income and education challenge Western-centric frameworks, underscoring the need for theories that reflect African socio-economic realities. Ghana's informal economy, extended family obligations, and limited institutional safety nets create behavioural imperatives not captured by models rooted in high-income contexts. This calls for theory-building that incorporates communal practices, informal savings mechanisms (e.g., susu), and collectivist orientations prevalent across Sub-Saharan Africa. Integrating social cognitive theory with behavioural economics offers a triadic framework where cognitive processes, environmental influences, and behaviours interact, moderated by cultural variables such as Ubuntu philosophy, which prioritises communal welfare. Methodologically, the study validates covariance-based SEM within African samples, establishing measurement equivalence and enabling cross-cultural comparisons. Overall, it provides empirical foundations for Africa-specific FWB theories that transcend adaptations of Western models, instead reflecting indigenous financial ecosystems, behavioural norms, and culturally grounded well-being conceptualisations.

## LIMITATIONS AND FUTURE RESEARCH

Some methodological limitations warrant acknowledgement and provide direction for future inquiry. First, the digital divide within Ghana introduces sampling bias, as data collection through WhatsApp, Facebook, and LinkedIn excluded individuals without internet access or digital literacy. With national internet penetration at approximately 58%, large segments of rural and lower-income populations were systematically excluded, skewing the sample toward urban, educated, and digitally engaged adults. This bias may have inflated observed FB competencies and limits generalisability to digitally excluded groups.

Second, urban–rural disparities in financial practices represent a critical limitation. Rural communities rely heavily on informal mechanisms such as susu, agricultural income, and community-based savings groups, contrasting sharply with urban reliance on formal banking systems. Given the likely overrepresentation of urban respondents, important rural–urban variations in the behaviour–well-being relationship may have been masked. Future studies should stratify sampling to ensure adequate rural representation.

Third, non-response bias remains a concern. Individuals experiencing financial distress or poor behaviours may have declined participation due to embarrassment or time constraints, potentially inflating FB scores and correlations. Future research should employ follow-up procedures, participation incentives, and sensitivity analyses to address this bias. Collectively, these methodological refinements would enhance external validity and ensure findings more accurately reflect Ghana’s diverse socio-economic and geographical realities.

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## APPENDIX

### Appendix 1: Survey Questionnaire

#### Questionnaire

This survey instrument has been designed to enable me carry out research on the topic: **“Impact of Financial Behaviour on Financial Well-being: Evidence Among Working Adults in Ghana”** Any information provided will be used for academic purposes ONLY. There are no risks associated with your participation, and your responses will remain confidential and anonymous.

#### Section A: Respondent’s Biography

When completing this questionnaire, please tick [] in the applicable box or provide an answer as applicable.

1. Gender:        [] Male                                [] Female
2. Age:            [] 18 -24 years        [] 25–44 years        [] 45-60 years  
                       [] above 60 years
3. Marital Status [] Married [] Single        [] Divorced/ Separated [] Dating
4. Educational Background:  
                       [] Diploma/a Level [] Bachelor’s Degree    [] Post graduate degree [] Ph.D./Doctorate  
                       [] Chattered [] BECE/WAEC / O’Level/ A’ Level [] Informal Education
5. Monthly income level in GH¢ Cedis:  
                       [] Below 4000.00 [] 4000.00-6,000.00 [] 6,001.00-8,000.00 [] 8,001.00- 10,000.00 [] 10,001.00-  
                       12,000.00 [] 12,001.00- 15,000.00 [] Above 15,000.00

#### Section B: Financial Behaviour (Fb)

Indicate the extent to which you agree or disagree with each statement by checking the appropriate number from 1 to 7 using the following scale:

1 = Strongly Disagree		2 = Disagree 3 = Neutral				
4 = Agree		5 = Strongly Agree				
Item	Statement	1	2	3	4	5
FB1	I paid all my bills on time	1	2	3	4	5
FB2	I kept a written or electronic record of my monthly expenses	1	2	3	4	5
FB3	I stayed within my budget or spending plan	1	2	3	4	5
FB4	I paid off credit card balance in full each month	1	2	3	4	5
FB5	I did not max out the limit on one or more credit cards	1	2	3	4	5
FB6	I began or maintained an emergency savings fund	1	2	3	4	5

FB7	I saved money from every pay check	1	2	3	4	5
FB8	I saved for a long-term goal such as a car, education, home etc	1	2	3	4	5
FB9	I contributed money to a retirement account	1	2	3	4	5

Source: Adopted and modified from Dew & Xiao (2011)

**SECTION C: Financial Well-Being (FWB)**

Indicate the extent to which you agree or disagree with each statement by checking the appropriate number from 1 to 7 using the following scale:

<i>1 = Strongly Disagree</i>		<i>2 = Disagree 3 = Neutral</i>				
<i>4 = Agree</i>		<i>5 = Strongly Agree</i>				
Item	Statement	1	2	3	4	5
FWB1	I am financially stressed these days.	1	2	3	4	5
FWB2	I feel satisfied with my present financial situation	1	2	3	4	5
FWB3	I feel good about my present financial situation	1	2	3	4	5
FWB4	I am confident that I can find the money to pay for financial emergency that costs about twice my weekly income	1	2	3	4	5
FWB5	Because of my money situation, I feel like I can purchase things that I want in life	1	2	3	4	5
FWB6	I am confident that the money I have will last for a long time	1	2	3	4	5

Source: Adopted and modified from Prawitz et al. (2006).

**Thank you for your participation**