Mediating Effect of Financial Self-Control in the Relationship between Financial Behavior and Financial Wellbeing

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> > **Abstract**

This study examines the mediating effect of financial self-control in the relationship between financial behavior and financial well-being. Current research conceptualizes financial behavior in terms of credit discipline, savings and investment, and financial awareness. The data from this study came from a survey of 550 employees who have worked with the Osun government for at least 10 years. The structural equation model (SEM) using STATA version 15 was used to analyze the data. This study establishes a positive and significant relationship between financial behavioral parameters and financial self-control and financial wellbeing. It also showed that financial self-control is a powerful predictor of financial well-being. Given this, civil servants must be rational in their financial behavior in order to provide post-retirement financial stability and long-term financial well-being. In addition, the results of the survey provide relevant data for governments and educators to hold seminars and workshops on the importance of financial behavior and self-regulation. This greatly contributes to ensuring that civil servants are financially safe after retirement and well cared for in the long run.

**Keywords:** Financial behavior, Financial well-being, Investment, Savings, Self-control.

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#### 1.Introduction

Recently, Nigeria has experienced economic instability and the financial crisis caused by new threats of Omicron surge, high levels of corruption, unimaginable inflation surges, income inequality, and spikes in external and domestic debt. Clearly, the National Bureau of Statistics (2021) has revealed that the country's external debt reached \$ 38 billion in September 2021 and its domestic debt increased to N20.64 trillion. Given these unfriendly indicators, the World Bank (2022) predicts that per capita income in 2022 will be lower than in the previous year. In addition, the study carried out by Sajuyigbe, Eniola, Ayeni, and Sanusi (2021) shows that the majority of retirees find it extremely difficult to have their daily bread within a few years of retirement. This connotes that financial behavior among civil servants is a perpetual issue despite the contributory scheme initiated by the government to serve as an incentive to save for the future. No wonder why civil servants become vulnerable spice after retirement in Nigeria. Therefore, it is important for civil servants to develop appropriate financial behavior to promote financial well-being after retirement. Financial behavior is associated with increased retirement savings (Arifin, 2017), investment (Miotto & Parente, 2015), and debt reduction (Sajuyigbe, et al., 2021). Financial behavior is a construct related to financial implementation such as cash and credit management, savings budgets, and investments. Hasibuan, Lubis, and Walad (2017) see financial behavior as how well people handle, manage, and use their financial resources. Previous studies have shown that financial behavior is an indicator of financial well-being (Gutter & Copur, 2011; Starobin et al., 2013). Financial well-being means having financial freedom and being able to save for future goals, including retirement. Studies show that financial behavior is significantly associated with financial well-being (Chavali, Mohanraj, & Ahmed, 2021). Starobin et al., (2013) argue that individuals who show financial behavior have a correspondingly significant impact on their financial well-being.

Financial self-control is another construct recognized by scholars and financial analysts as a predictor of financial behavior and financial well-being. Studies have shown that financial behavior and financial well-being lead to a high level of involvement in financial self-control (Lusardi, 2012; Miotto and Parente, 2015). Strömbäck et al.,(2017) confirm that financial self-control affects people's economic behavior and their perceived financial well-being. Previous studies have pointed out the relationship between these three constructs components, but no study focus on the mediating role of financial self-control, therefore, this study examines the

mediating role of financial self-control in relation to the relationship between financial behavior and financial well-being of civil servants in Osun, Nigeria.

# **Conceptual Review**

### **Concept of Financial Behavior**

The concept of financial behavior can be traced back to Selden's 1912 stock market psychology, Fesinger's 1956 study of cognitive dissonance, and Pratt's 1964 discussion of risk aversion and utility functions (Zulfaris et al., 2020). Financial behavior is not only related to emotions and behaviors, but also many psychologies (Miotto & Parente, 2015). Over the last three decades, the field of behavioral finance has grown significantly to help people make better investment decisions (Hasibuan et al., 2017). Financial behavior is defined as how well a household or individual manages financial resources such as budget savings, insurance and investment. A person's financial behavior can be judged by how well he manages cash, debt, savings, and other costs (Arifin, 2017). Financial behavior states that people often make financial decisions based on emotional and cognitive bias rather than rational and computational (Akben, 2015). Dew and Xiao (2011) also argue that financial behavior is a financial decision that individuals make in their daily lives, such as cash, loan, savings, and investment management. Hasibuan, Lubis, and Walad (2017) see financial behavior as how well people handle, manage, and use their financial resources. Research evidence that individuals with responsible financial behavior tend to manage and earn money effectively (Susilowati et al., 2017). The study identified financial literacy, financial socialization, and financial attitudes as factors influencing financial behavior (Akben, 2015; Arifin, 2017; Zulfaris et al., 2020). A study by Gathergood (2012) confirms that financial behavior is affected by spending and savings.

## **Financial Wellbeing**

Financial well-being is important to policymakers, industry, and stakeholders, especially as the global economy is slowly recovering from the recent financial turmoil caused by the COVID-19 surge. Nigeria has a fundamental lack of incentives to save due to rising consumer demand, poor banking habits and directions, and high unemployment, which had adversely affected financial wellbeing. Financial well-being is a state in which a person fulfills his or her financial obligations and feels at ease in the economic future. Financial well-being has been studied in areas such as economics, marketing, organizational psychology, financial consulting, and planning. However, there is no universally accepted definition of financial behavior and its

conceptualization. Some scholars use objective and subjective traits to measure financial well-being. For example, Shim et al., (2009) conceptualized the financial well-being of individuals, including the level of individual debt as an objective measure of well-being and their satisfaction with their financial position as a subjective measure. In a similar study, Porter and Garman (1992) used quantitative indicators of financial statuses, such as income levels, as an objective measure of economic well-being, and recognized satisfaction with living standards as a more subjective measure. Aggarwal (2014) sees financial well-being as an individual's ability to increase and manage liquidity.

# Relationship between Financial Behavior and Financial Wellbeing

Numerous studies that examined the relationship between financial behavior and financial wellbeing are reviewed as follows: Brüggen et al (2017) examine the extent to which financial behavior influences financial well-being. They discovered that the financial behavior framework is an alternative paradigm to financial wellbeing. In another study, Osman1, Madzlan, and Ing (2018) examine the relationship between financial literacy, financial stress, financial behavior, and financial well-being. The findings show that financial literacy, and financial stress, have a significant correlation with financial well-being, while financial behavior has no significant relationship with financial well-being. A study by Starobin et al., (2013) evaluates the significant relationship between financial behavior and financial wellbeing. Their results establish a positive relationship between financial behavior and financial well-being. A study conducted in Ghana by Adam, Frimpong, and Boadu (2017) on the effect of financial literacy, financial behavior, family support, and financial wellbeing. The results reveal that financial literacy, financial behavior, and family support are strong predictors of financial wellbeing. In the same perception, Lusardi and Mitchell (2011) assert that financial well-being is a function of financial behavior, financial literacy, investment, and retirement planning.

Research advocates that exhibition of positive financial behavior, is a platform for financial empowerment and future social security (Hasibuan, Lubis, & Walad, 2017). A similar study carried out in India by Chavali, Mohanraj, and Ahmed (2021) on the influence of financial behavior on financial wellbeing, reveals that savings and investments, cash management, financial consciousness, and credit indiscipline are financial behavioral characteristics that

influence the financial well-being of an individual. In this vein, the studies of Starobin et al., (2013) and Gutter and Copur (2011) affirm that saving and investment, credit indiscipline, and financial consciousness influence financial well-being. Another study was conducted by Selvia1, Rahmayanti, Afandy, and Zoraya (2021) on the relationship between financial knowledge, financial behavior, financial inclusion, and financial well-being. The result reveals financial knowledge, financial behavior, and financial inclusion, have a significant influence on financial well-being. Also, Delafrooz and Paim (2013) reaffirm that cash management, credit indiscipline, savings habit, and investment influence an individual's financial wellbeing. Additionally, Research by Bruggen et al (2017) proves a positive relationship between financial behavior and financial well-being. Xiao et al., (2009) also reiterate that individuals who exhibit positive financial behaviors such as budgets maintenance, savings, avoidance of wrong financial decisions, cash management, and investment, have high financial well-being. Based on the above empirical claims, the following hypotheses are proposed:

H<sub>1</sub>: Savings and investments have a positive association with financial wellbeing.

H<sub>2</sub>: Credit discipline has a negative association with financial wellbeing.

H<sub>3</sub>: Financial consciousness has a positive association with financial wellbeing.

## Financial Self-control as a Mediator

Financial self-control is the ability of an individual to adjust his financial behavior and be rational in spending and maintaining a happy mood all the time (Baumeister, 2002). Tangney et al. (2004) argue that high levels of self-control make people control impulse buying and be rational in spending. The theory of mental accounting advocates that people are highly self-controlled by keeping track records of their income and expenses in their minds and allocating money accordingly to different categories and using them to cover expenses. In the same direction, the life cycle theory of saving propended by Modigliani and Brumberg (1954) reiterates that people are rational and consistent with their decisions. Thus, both theories conclude that positive financial self-control has a significant link to financial wellbeing. Additionally, the behavioral life cycle (BLC) theory developed by Shefrin and Thaler (1988) argues that people are irrational in financial behavior because they have dual-self conflict and are not consistent with their decision due to the framing effect. The theory advocates that lack

of financial self-control has a significant inverse relationship with financial wellbeing. The ability to control impulses is a vital factor for financial security and long-term financial wellbeing. The studies of Ballinger et al. (2011) and Miotto and Parente (2015) predict the linear relationship between financial self-control, financial discipline, cash management, saving and investment, credit commitment, and financial wellbeing. Self-control has been proved to be positively related to financial wellbeing, savings and investment, credit discipline, and retirement planning (Kim et al., 2006; Wang & Hesketh, 2012; Biljanovska & Palligkinis, 2015; Achtziger et al., 2015). Thus, the following hypotheses emerged:

H<sub>4</sub>: Financial control mediates between savings and investments, and financial wellbeing

H<sub>5</sub>: Financial control mediates between credit discipline and financial wellbeing.

**H**<sub>6</sub>: Financial control mediates between financial consciousness and financial wellbeing.

#### **Methods**

# **Sample and Procedure**

The data for this study were obtained from 550 civil servants that are working with the Osun State government for not less than 10 years through a questionnaire survey. All respondents were informed of data confidentiality and that information supply will be strictly used for research purposes alone. Among them, males represent 59%, while females represent 41%; the mean age of the sample was 48.89 years old. Ph.D. degree holders accounted for 1.30%, Master's degree holders accounted for 30.50%, B.Sc/HND holders accounted for 48.72%, NCE/ND holders accounted for 15.71% while school certificate holders accounted for 3.77%; In terms of length of service, 30.56% of the respondents have 5-10 years, 50.23% have 11-20 years, while 19.21% have more than 20 years.

#### Measures

The financial behavior construct was conceptualized by saving and investment, credit discipline, and financial consciousness as follows:

Savings and Investments Scale: This scale was developed and validated by Chavali et al., (2021) and has a total of 3 items, for example, I keep the money for a transactional motive in an account, and I invest in treasury bills, bonds, and stocks. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor  $\alpha$  was 0.812.

Credit Discipline Scale: This scale was developed and validated by Chavali et al., (2021) and has a total of 4 items, for example, I make only minimum payments on a loan, and I settle my bills each month. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor  $\alpha$  was 0.821.

**Financial Consciousness Scale:** This scale was developed and validated by Stromback et al., (2017) and has a total of 3 items, for example, I keep a written record of my expenses, and I stay within my budget or spending plan. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor  $\alpha$  was 0.805.

**Financial Self-control Scale:** This scale was developed and validated by Stromback et al., (2017) and has a total of 4 items, for example, I don't act impulsively, and I have a hard time breaking bad behavior. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor α was 0.817.

Financial Wellbeing Scale: This scale was developed and validated by Stromback et al., (2017) and has a total of 3 items, for example, I feel confident about having enough money to support myself in retirement, no matter how long I live, and I feel secure in my current financial situation. The Likert 5-point scale was used ranging from 1 (strongly disagree) to 5 (strongly agree). The scale's internal consistency factor  $\alpha$  was 0.819.

# **Data Analysis and Results**

Table 1: Path analysis without mediation

Relationship between variables	Coef.	Std. Err.	Z	P> z
$CDS \rightarrow FCS$	.6973838	.1056053	6.60	0.000
$SIC \rightarrow FCS$	.0175211	.0941616	0.19	0.852
$FDS \rightarrow FCS$	.1946694	.0932651	2.09	0.037
$FCS \rightarrow FWS$	.5296302	.0540081	9.81	0.000
$CDS \rightarrow FWS$	.1725638	.1150092	1.50	0.134
$SIC \rightarrow FWS$	.0827168	.0968961	0.85	0.393
$FDS \rightarrow FWS$	.0449394	.0965433	0.47	0.642

Table 1 shows the direct effect of financial behavior on financial self-control and financial wellbeing. The results reveal that credit discipline (CDS) has a positive and significant effect on financial self-control (FCS) with a beta value of 0.697, z-value of 6.60, and p-value of 0.000. This implies that financial self-control is bound out of credit discipline. It was also revealed that savings and investments (SIC) ( $\beta = 0175$ ; z = 0.19; p>.05) have a positive linear relationship with financial self-control but are insignificant. This suggests that savings and investment have a weak impact on financial self-control. The most likely of these weak effects is the domestic epilepsy economic syndrome. In addition, a z-value of 2.09 and a beta value of 0.194 indicate that financial consciousness (FDS) is predictive of financial self-control, while the p-value of 0.035, connotes that financial consciousness has a significant effect on financial self-control at a 5% level of significance. Conclusively, the study concurs with the previous studies that financial behavior is a major determinant of financial self-control (Kim et al., 2013; Liu, 2014; Biljanovska & Palligkinis, 2015; Achtziger et al., 2015; Ballinger et al., 2011; Miotto & Parente, 2015).

The results from Table 1 also reveal that financial self-control is a strong predictor of financial well-being with a beta-value of 0.529 and z-value of 9.81. The p-value of 0.000 indicates that financial self-control is significantly influenced by financial well-being at a 5% level of

significance. The z-value of 1.50 and beta value of 0.172 suggest that credit discipline is positively related to financial wellbeing, while the p-value of 0.134 indicates that credit discipline is not significantly influenced financial wellbeing. It was also revealed that savings and investments have a positive association with financial well-being with a beta-value of .082 and a z-value of 0.85. The p-value of 0.393 shows that savings and investments did not have a significant effect on financial wellbeing. Furthermore, the beta value of 0.044, z-value of 0.47, and p-value of 0.642 indicate that financial consciousness has a positive effect on financial well-being but is insignificant.

**Table 2: The mediating effect of Financial Self-control** 

Relationship between variables	Coef.	Std. Err.	Z	P> z
CDS→FCS→FWS	.3693555	.0674312	5.48	0.000
$SIC \rightarrow FCS \rightarrow FWS$	.0092797	.0498798	0.19	0.852
$FDS \rightarrow FCS \rightarrow FWS$	.1031028	.0505025	2.04	0.041

Table 2 shows the mediating effect of financial self-control between aspects of financial behavior and financial wellbeing. A z-value of 5.48 and a p-value of 0.000 indicate partial mediation. This suggests that financial self-control partially mediates between credit discipline and financial wellbeing. This result is consistent with Baron and Kenny (1986) that partial mediation occurs when both direct and indirect effects are significant. This result also shows that when the p-value is 0.009 and the p-value is 0.852, financial self-control has no mediating effect between savings, investment, and financial well-being. Baron and Kenny (1986) argue that no mediation occurs if the p-value for the indirect effect is greater than 0.05. This shows that financial self-control does not have a significant mediating effect between savings and investment and financial wellbeing. In addition, a z-score of 0.103 and a p-value of 0.041 indicate that financial self-control partially mediates between financial consciousness and financial wellbeing.

# **Structural Equation Modelling**

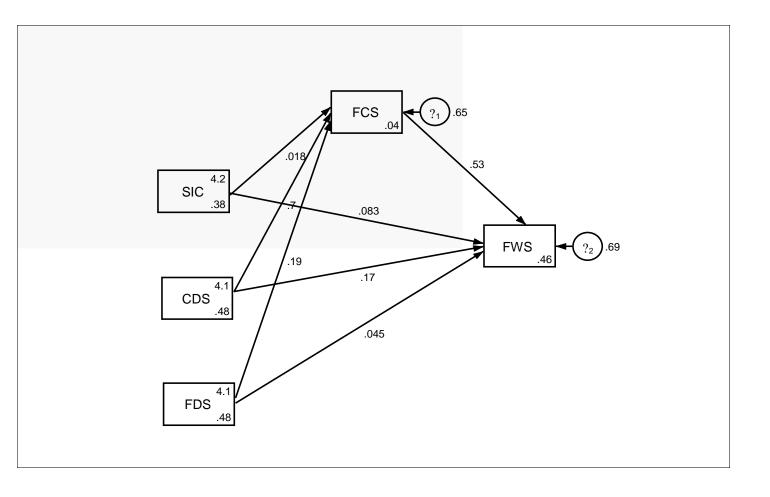


Figure 1: Structural Equation Model

Table 3 Equation-level goodness of fit

Depvars	Variance		Residual	R-squared	Mc	mc2
	fitted	predicted				
Observed						
FCS	1.011614	.3606979	.6509158	.356557	.5971239	.356557
FWS	1.12153	.4323242	.6892055	.3854773	.6208681	.3854773
Overall	.3766072	•	•	•		•

mc = correlation between depvar and its prediction

mc2 = mc^2 is the Bentler-Raykov squared multiple correlation coefficient

Table 3 shows the equation-level goodness of fit test. The fitted and predicted variance in financial self-control is 1.011614 and 0. 3606979, while the computed R-square value is 0.356557. This connotes that 35.65% of the variation in the dependent variable in this particular model (financial self-control) is accounted for by variations in the explanatory variables (CIS, CDS, and FDS). Furthermore, the fitted and predicted variance in financial wellbeing is 1.12153 and 0.4323242, thus resulting in a computed R-square value of 0.385. This value indicates that 38.50% of the variation in financial wellbeing is explained by (CIS, CDS, and FDS) with financial self-control as a mediator.

### **Conclusion**

This study examines the mediating effect of financial self-control in the relationship between financial behavior and financial well-being. Current research conceptualizes financial behavior in terms of credit discipline, savings and investment, and financial awareness. The data from this study came from a survey of 550 employees who have worked with the Osun government for at least 10 years. The structural equation model (SEM) using STATA version 15 was used to analyze the data. This study establishes a positive and significant relationship between financial behavioral parameters and financial self-control and financial wellbeing. It also showed that financial self-control is a powerful predictor of financial well-being. Therefore, this finding is consistent with the claims of mental accounting theory and behavioral life cycle theory (BLC) that financial self-control is significantly associated with financial wellbeing. Consistent with researchers' expectations, there is also a positive link between financial behavior, self-control, and financial wellbeing.

## **Policy Implication**

The results of this study have important implications for policymakers, civil servants, and researchers. As a result, it was confirmed that people with unreasonable financial behavior tend to experience financial instability in the future. Also, people with the ability to control purchasing impulses tend to experience financial security and long-term financial well-being. Given this, civil servants must be rational in their financial behavior in order to provide postretirement financial stability and long-term financial well-being. In addition, the results provide relevant data for governments and educators to hold seminars and workshops on the importance of financial behavior and self-regulation. This greatly contributes to ensuring that civil servants are financially safe after retirement and well cared for in the long run.

## **Contribution to knowledge**

This study provided empirical evidence of the mediating effect of financial self-control in the relationship between financial behavior and financial well-being. The results of the study are inputs that significantly improve the ability of policymakers, civil servants, and educators to understand the importance of financial self-control as a driving force for improving the financial well-being of the civil servants after retirement.

#### References

Achtziger, A., Hubert, M., Kenning, P., Raab, G.,& Reisch, L., 2015. Debt out of control: The links between self-control, compulsive buying, and real debts. *J. Econ. Psychol.* 49, 141–149. Adam, A. M., Frimpong, S., & Boadu, M.O. (2017). Financial literacy and financial planning: Implication for financial well-being of retirees. *Business and Economic Horizons*, 13(2), 224-236.

Aggarwal, S. (2014). Developing an index for measuring financial well-being in a geography. IFMR Finance Foundation.

Akben, S. E. (2015). Factors influencing college students' financial behaviors in Turkey:

Evidence from a National Survey. *International Journal of Economics and Finance*, 7(6), 87–94.

Arifin, A. Z. (2017). The influence of financial knowledge, control, and income on individual financial behavior. *European Research Studies Journal*, 20(3), 635–648.

Ballinger, T.P., Hudson, E., Karkoviata, L., Wilcox, N.T., 2011. Saving behavior and cognitive abilities. Exp. Econ. 14 (3), 349–374.

Baumeister, R.F., (2002). Yielding to temptation: Self-control failure, impulsive purchasing, and

consumer behavior. J. Consum. Res. 28 (4), 670–676.

Biljanovska, N., & Palligkinis, S., (2015). Control thyself: Self-control failure and household

wealth. SAFE Working Paper No. 69. Available at SSRN: <a href="https://ssrn.com/abstract=2509080">https://ssrn.com/abstract=2509080</a>. Bruggen, E.C, Hogreve, J., Holmlund, M., Kabadayi, S., & Lofgren, M. (2017). "Financial Well-being: A Conceptualization and Research Agenda.," *Journal of Business Research*, 2017. Chavali, K. Mohanraj, P & Ahmed, R. (2021). Does Financial Behavior Influence Financial Well-being? *Journal of Asian Finance, Economics and Business Vol 8 No 2 (2021) 0273–0280*. Delafrooz, N & Paim, L. H. (2013) "Role of Financial Stress On Relationship Between Financial

Problem And Financial Wellness Among Malaysia Workers," African Journal of Business Management, vol. 7(20), pp. 1966-1972, 2013.

Dew, J., & Xiao, J. J. (2012). The financial management behavior scale: Development and validation. *Journal of Financial Counselling and Planning*, 22(1), 43-59.

Gathergood, J. (2012). Self-control, financial literacy, and consumer over-indebtedness. *Journal of Economic Psychology*, *33*, 590-602.

Gutter, M., & Copur, Z. (2011). Financial behaviors and financial well-being of college students:

Evidence from a National Survey. Journal of Family and Economic Issues, 32(4), 699–714.

Hasibuan, B.K., Lubis, Y.M & Walad, A.A (2017). *Financial Literacy and Financial Behavior as a Measure of Financial Satisfaction*. Advances in Economics, Business and Management Research (AEBMR), volume 46 1st Economics and Business International Conference 2017 (EBIC 2017).

Kim, J., Sorhaindo, B., & Garman, E. T. (2006). Relationship between financial stress and workplace absenteeism of credit counseling clients. *Journal of Family and Economics Issues*, 27, 458-478.

Lusardi, A. (2012). Numeracy, financial literacy, and financial decision making. Working Paper

17821. Cambridge, MA: National Bureau of Economic Research.

Lusardi, A., & Mitchell, O. S. (2011b). Financial literacy around the world: An overview. Journal of Pension Economics and Finance, 10(4), 497-508.

Miotto, A. P. S. C., & Parente, J. (2015). Antecedents and consequences of household financial management in Brazilian lower-middle-class. *Revista de Administração de Empresas*, 55(1), 50–64.

Modigliani, F., & Brumberg, R., 1954. Utility analysis and the consumption function: An interpretation of cross-section data. In: Kurihara, Kenneth K. (Ed.), Post Keynesian Economics. Trustees of Rutgers College, New Jersey, p. 1.

National Bureau of Statistics (2021). https://www.nigerianstat.gov.ng/

Porter, N. M., & Garman, E. T. (1992). Money as part of a measure of financial well-being. American Behavioral Scientist, 35(6), 820–826.

Sajuyigbe, A.S, Eniola, A.A, Ayeni, A & Sanusi, B. M (2021). Moderating effect of employees' retention on the influence of contributory pension scheme on employees' attitudes. *Organizational Psychology*, 2021, Vol. 11, No. 3, P. 62–77.

Selvia, G, Rahmayanti, D., Afandy, C & Zoraya, I. (2021). The effect of financial knowledge, financial behavior, and financial inclusion on financial well-being. BISIC 2020, October 03-04, Bengkulu, Indonesia.

Shefrin, H.M., & Thaler, R.H., 1988. The behavioral life-cycle hypothesis. Econ. Inquiry 26 (4), 609–643.

Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, 30(6), 708–723.

Starobin, S. S., Hagedorn, L. S., & Purnamasari, A. (2013). Examining financial literacy among transfer and non-transfer students: Predicting financial well-being and academic success at a four-year university. *Journal of Research and Practice*, *37*(3), 216–225.

Stromback, C., Lind, T., Skagerlund, K., Vastfjall, D., & Tinghog, G. (2017). Does self-control

predict financial behavior and financial well-being? *Journal of Behavioral and Experimental Finance*, 14, 30–38.

Susilowati, N., Latifah, L., & Jariyah, O. (2017). College student financial behavior: An empirical study on the mediating effect of attitude toward money. *Advanced Science Letters*, 23(8), 7468–7472.

Tangney, J.P., Baumeister, R.F., Boone, A.L., 2004. High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *J. Pers.* 72 (2), 271–324.

Wang, M. & Hesketh, B. (2012). Achieving well-being in retirement: Recommendations from 20 years of research. *SIOP White Paper Series*, 1(1), 11-22.

World Bank (2022). Word Bank forecast Nigeria's economy. Available at https://www.thecable.ng/world-bank-forecasts-nigerias-economy-to-grow-by-2-5-in-2022

Xiao, J. J, Chuanyi, T, & Soyeon S. (2009). "Acting for happiness: Financial behavior and life satisfaction of college students," Social indicators research, vol. 92(1), pp. 53-68, 2009.

Zulfaris, M. D., Mustafa, H., Mahussin, N., Alam, M. K., & Daud. Z. M. (2020). Students and money management behavior of a Malaysian public university. *The Journal of Asian Finance, Economics, and Business*, 7(3), 245–251.