



The moderator effect of socioeconomic status on the relationship between parental financial teaching and financial literacy

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Abstract

The primary aim of this research was to investigate the potential moderating effect of parental Socioeconomic status (SES) on the association between parental financial education and the financial literacy of young black African individuals. Financial literacy was measured through financial knowledge, financial behaviour, financial attitudes, and financial decision-making. Parental SES was measured by parental income. A quantitative approach was adopted for this study. A self-administered questionnaire was used to collect data from young adults in South Africa. Moderated regression analysis was used to analyse data. The results showed that parental income did not moderate the relationship between parental financial teaching and financial decision-making. Furthermore, the results indicated that parental income moderated the relationship between parental financial teaching and financial knowledge, financial behaviour, and financial attitude. Therefore, the overall results indicated that the relationship between parental financial teaching and financial literacy is moderated by parental SES. This study represents one of the initial attempts to examine the moderated association between parental financial instruction, financial literacy, and parental socioeconomic status (SES). Government must improve parental SES as it influences parental financial teaching and financial literacy. This study concluded that parental SES is important as it moderates the relationship between parental financial teaching and financial literacy.

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1. Introduction

The significance of socioeconomic status (SES) is progressively gaining prominence in the realm of parental financial education and financial literacy. Research has provided evidence regarding the significance of socioeconomic status (SES) in relation to parental financial education. It has been observed that parents with varying SES levels may approach the task of imparting financial knowledge to their children in distinct ways. (Batten, 2015; Kamaruddin & Mokhlis, 2003; Sherraden, 2013). Thus, parents who have a higher SES tend to have broader insight, and they are able to achieve greater income compared to those who have a lower socioeconomic status (Radianto, Efrata, & Dewi, 2019). It is noted that parents with higher incomes are more likely to get involved in financial education (Serido, Shim, Mishra, & Tang, 2010). The influence of SES has also been noted in financial literacy studies. Thus, studies have shown that parents' SES has a significant effect on young adult's financial literacy and personal financial management (Homan, 2015; Ismail, Rowa, Tendean, Huseno, & Hartati, 2022; Radianto et al., 2019). Nevertheless, there is still a need to establish with certainty whether parental socioeconomic status (SES) can act as a moderating factor in the association between

parental financial education and financial literacy. After a comprehensive review of literature, it seems that there are limited studies that have investigated the moderating effect of parental SES on the relationship between parental financial teaching and financial literacy. There are studies that investigate similar issues. Siegfried and Wuttke (2021) found that the relationships between self-reported financial literacy, financial learning opportunities, delay of gratification, and financial literacy are moderated by gender and educational background.

Alshebami and Aldhyani (2022) study revealed that self-control played a negative role in the association between financial literacy and consumption of savings. Agabalinda and Isoh (2020) found that social learning moderates the relationship between financial literacy and financial service usage. Therefore, the current study is among the first to investigate the moderating effect of parental SES on the relationship between parental financial teaching and financial literacy. The investigation of this relationship holds significance due to the potential existence of a moderating effect. If such an effect is confirmed, it would necessitate increased efforts to prioritise parental socioeconomic status (SES) and enhance parental financial education. This, in turn, would contribute to the promotion of higher levels of financial literacy among young adults. Financial literacy is important for the empowerment of individuals to take better and more appropriate financial decisions that ensure effective financial management (Arceo-Gomez & Villagomez, 2017). The objective of this study is to determine the moderating effect of parental SES on the relationship between parental financial teaching and financial literacy among young adults in South Africa. Young adults in South Africa are suffering from low levels of financial literacy and are struggling to manage their finances (Business, 2021). Parental SES was measured by parental income. Parental income has been noted as a prominent measure of parental SES in literature (Radianto et al., 2019; Serido, LeBaron, Li, Parrott, & Shim, 2020). Financial literacy was measured through financial knowledge, financial behaviour, financial attitude, and financial decision-making.

Therefore, the following hypotheses were formulated:

H1: The relationship between parental financial teaching and financial knowledge is moderated by parental income.

H2: The relationship between parental financial teaching and financial behaviour is moderated by parental income.

H3: The relationship between parental financial teaching and financial attitude is moderated by parental income.

H4: The relationship between parental financial teaching and financial decision-making is moderated by parental income.

The remainder of this article is structured as follows: Section 2 provides a literature review. Section 3 explores the research and methodology of the study. Section 4 covers the analysis and discussions for the study. Section 5 concludes this study.

2. Literature Review

2.1. Social Learning Theory

This study adopts social learning theory to explain and understand parental financial teaching and socioeconomic status of young black African adults in rural and low-income areas of South Africa. Social learning theory, as advocated by Bandura (1977), originated from behaviourism, and posits that people learn from interactions with others in a social context. This theory also indicates that, as children learn over the years through social interaction in a particular social setting, they begin to understand the financial attitudes and knowledge. This theory positions parents at the centre of the social learning process, both as teachers and as role models. Learning takes place through active teaching and communication, unconscious observation and imitation, and positive or negative reinforcement from parents. Children may observe their parents engaging in consumption or saving activities. Therefore, parents are the key influencers in children's lives as they grow up and learn the financial attitudes from their parents. Social learning theory has been empirically validated in financial socialisation studies (Agnew, 2018; Garrison & Gutter, 2010; Jorgensen, 2007; Kolodziej, Lato, & Szymanska, 2014). Thus, this study adopted Bandura (1977) social learning theory to examine parental financial teaching.

2.2. Life-cycle Savings Hypothesis

Modigliani and Brumberg (1954) introduced the life-cycle hypothesis of saving as an extension of the permanent income hypothesis. The life-cycle hypothesis suggests that people try to maintain a relatively stable level of consumption throughout their lifetime. This behaviour is shown when younger people borrow money to cover their consumption demands, middle-aged people save a sizable amount of their income, and elderly people use their assets when their retirement income decreased. A strict interpretation of the life-cycle hypothesis suggests that people will spend all of their assets before the end of their lives. However, this may not be exactly the case, as people reduce their consumption as they age. The aim is to retain assets to cover unexpected increases in lifespan and medical expenses (DeVaney, 2016). Lusardi and Mitchell (2014) developed a life-cycle savings model that addresses the role of financial literacy. According to this paradigm, financial literacy is endogenously determined throughout one's life. Thus, consumers invest in financial knowledge when their marginal time and money costs are equal to their marginal benefits. They concluded that consumers who receive financial education will be able to manage their money better than their counterparts who do not receive financial education.

2.3. Financial Literacy

Financial literacy is a broad concept that encompasses domains like financial knowledge, financial behaviour, and financial attitude (Arceo-Gomez & Villagomez, 2017). There is no agreement in the literature regarding the definition of financial literacy (Remund, 2010). Other studies have defined financial literacy as the ability to read, analyse, manage, and communicate about the personal financial conditions that affect the financial well-being (Beal & Delpachitra, 2003; Chen & Volpe, 2002; Mandell, 2008; Morton, 2005; Petpairote, 2023; Respati et al., 2023). Financial literacy is defined by the Organisation for Economic Cooperation and Development (OECD) as a combination of the awareness, knowledge, skills, attitudes, and behaviours required to make wise financial decisions, with the ultimate goal of achieving financial security and participation in economic life (OECD, 2017). This study measured financial literacy through financial knowledge, financial behaviour, financial attitude, and financial decision-making.

Financial knowledge is an important domain of financial literacy. Delavande, Rohwedder, and Wills (2008) posit that financial knowledge is a particular type of capital acquired in life by learning to manage income, expenditure, and savings, soundly. Knowledgeable individuals can handle financial information effortlessly (Ramalho & Forte, 2019). Financial knowledge is likely to have a positive effect on young adults' awareness of money behaviours such as the recording of expenses and a saving attitude (Supanantarook, Lensink, & Hansen, 2017). Lower financial knowledge has been linked to a higher tendency to engage in risky financial practices amongst college students (Mitchell & Lusardi, 2015).

Financial behaviour is the key antecedent in predicting financial well-being (Rahman, Isa, Masud, Sarker, & Chowdhury, 2021). Financial behaviour can be classified as either favourable or unfavourable, and is manifested through individuals' patterns of saving and spending. Desirable financial behaviour is often viewed as the cornerstone of financial well-being. Studies have found that desirable financial behaviours are associated with positive financial outcomes. A study by Fan and Park (2021) found a positive association between financial management behavior and the financial well-being of young adults. Undesirable financial behaviour encompasses excessive expenditure on products and services, impulsive use of credit, running out of cash, absence of savings for emergencies, and failure to meet monthly debt obligations (Struwig, Roberts, & Gordon, 2018). Chavali, Mohan, and Ahmed (2021) found that financial behaviour has a significant impact on financial well-being. Individuals that worry about debt repayment and meeting financial emergencies are associated with lower levels of savings, undesirable financial behavior, and low financial well-being (Mayer, Zick, & Marsden, 2011).

Financial attitude is important in demonstrating desirable financial behaviour which leads to effective management of personal finances. Financial attitude influences financial management behaviour (Ameliawati & Setiyani, 2018). Young adults may exhibit either favourable or unfavourable dispositions towards their present financial circumstances, monetary resources, and credit. Studies found that being positive about the status of finances is linked with better financial outcomes because individuals would put more effort into remedying the situation and act positively towards money. Holding a negative attitude towards finances is associated with poor money management (Robb & Woodyard, 2011). Thus, young adults must demonstrate a positive financial attitude in order to act positively towards their finances.

Financial decision-making is an important aspect of financial literacy and achieving financial well-being. Financial decision-making is a subject of locus control, which focuses on how people view the world, which later affects their beliefs and shapes their perception through external and internal extremes (Grable, Park, & Joo, 2009). Financial decision-making plays a crucial role in determining the amount of money that is saved, the allocation of an individual's financial resources, the selection of investment products, the level of risk undertaken, and ultimately, the potential return that can be attained. These actions, in turn, directly lead to differences in individuals' wealth (Xu & Yao, 2022). Individuals' financial decisions are influenced by various settings, conditions, and changes over time. Financial decision arrangements may vary by the types of financial decisions, e.g., small vs. large purchases, bill payment, savings, investing, and financial planning (Kim, Gutter, & Spangler, 2017). Financial decisions nowadays are more complex for young adults than in the past, and they have considerable consequences for young adults' life pathways, well-being, and wealth (Sirsch, Zupančič, Poredoš, Levec, & Friedlmeier, 2020).

2.4. Parental Financial Teaching

Parental financial education is a crucial part of financial socialisation and has been shown to have an impact on young people's and professionals' financial literacy (Antoni & Saayman, 2021). Parental financial teaching is critical in developing the values, norms, and behaviours that will positively affect young adults' financial well-being (Grohmann, Kouwenberg, & Menkhoff, 2015; Van Campenhout, 2015). Shim, Barber, Card, Xia, and Serido (2010) assert that explicit financial teaching is linked to children's financial learning and their future financial behaviours. By explicitly imparting objective financial knowledge and expressing their own financial rules and expectations with their children, parents socialise them in financial matters. Bucciol and Veronesi (2014) found that adults whose parents taught them to save are more likely to save. Soyeon Shim, Xiao, Barber, and Lyons (2009) assert that parental financial teaching has a stronger influence on the financial knowledge of first-year college students than financial education in high school and the early years.

Norvilitis and MacLean (2010) found that parental facilitation exerts a significant positive impact on credit card usage, debt accumulation, and credit utilisation among young adults. Webley and Nyhus (2013) found that parental financial teaching, such as encouraging children to save money, has a positive effect on future orientation of young adults from the age of 18 to 32.

2.5. Parental Socioeconomic Status

Parental SES includes parents' income, education, and occupation, all of which play a crucial role in the financial socialisation of their children. According to Batten (2015), parents in different social classes are likely to teach their children about money differently. This suggests that the influence of parents on their children from childhood to young adulthood may vary according to SES, which may change over time (Kamaruddin & Mokhlis, 2003). This study measured parental SES through parental income. Gudmunson and Danes (2011) assert that income underpins parents' ability to foster desirable financial practices in their children, which can lead to better financial outcomes in adulthood. Furnham (1999) revealed that children whose parents had greater incomes saved more money. Serido et al. (2020) found a positive relationship between high parental SES and financial practices in childhood and adulthood. Parents with a higher SES may be more proactive and confident in teaching their children about finances (Serido et al., 2020). Ward (1974) argued that children from low-income homes are more likely to be skilled consumers, because they have to learn disciplined use of scarce resources. Sherraden (2013) adds that parents with a low income are less likely to socialise their children financially. Thus, children from low-income homes have less experience with money and could be less aware of the range of consumer goods. Thus, parental SES is important in financial socialisation and needs to be investigated further to understand if it moderates the relationship between parental financial teaching and financial literacy.

3. Research and Methodology

This study used a quantitative research approach to investigate whether the relationship between parental financial teaching and financial literacy is moderated by parental SES. This research approach allows for a stable and predictable world, which gives the researcher more control over external factors in testing the relationship between variables and expressing or explaining a phenomenon in amount or quantity (Adams, Khan, & Raeside, 2014). A self-administered Likert scale questionnaire was used to collect data. This questionnaire was designed to fulfil the objective of the study as it is standardized, simple to administer, quick, and relatively inexpensive (Bhandarkar & Wilkinson, 2010). A trial investigation was done to make sure the questionnaires would measure the things they were supposed to test before they were given to respondents. Furthermore, questionnaires were sent to academics and experts in financial socialisation and financial literacy to evaluate whether the measures covered the facets that make up the concept. To make sure they were prepared to gather data, their suggestions were examined, and the questionnaire was amended as necessary. The population for this study is young adults in South Africa between the ages of 18 and 35. The sample size for this study is 500 young adults, calculated through Yamane (1967) formula. This study used simple random sampling because it gave every young adult in every province of South Africa an identical chance to be included in the sample (Babbie, 2013). South Africa is comprised of nine provinces. To determine the order in which the provinces were selected, the names of the provinces were written on individual pieces of paper, folded, and placed in a box. Subsequently, the pieces of paper were drawn one by one from the box, and the provinces were ordered according to the order in which they were drawn. The province that was picked first was visited first, then the next province, until the sample size was reached. The study involved conducting home visits to young adults over a three-month period, primarily on weekends. This approach was chosen to maximise the availability and accessibility of individuals who may be attending school or working, thereby increasing the likelihood of obtaining a high response rate. The questionnaire was completed by a total of 472 young black African adults, resulting in a response rate of 94%.

This study dealt with the issues of validity and reliability. Validity was performed through construct validity by conducting a Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. The acceptable value of KMO is 0.50 and above. While Bartlett's test of sphericity is significant if the significance value is ($p < 0.05$). Factor loadings of ± 0.30 to ± 0.40 are minimally acceptable, values greater than ± 0.50 are generally considered necessary for practical significance (Hair, Black, Babin, & Anderson, 2014). This study retained a minimum factor loading of 0.30 for interpretation. Reliability was measured through Cronbach's alpha and a score of 0.60 or more was accepted as reliable (Cohen, Manion, & Morrison, 2018).

Descriptive statistics and moderated regression analysis were used to analyse data for this study. Descriptive statistics describe and summarise the characteristics of the sample without making inferences or determining causal relationships. Descriptive statistics encompassed frequency distributions, percentages, central tendencies, and measures of dispersion or variability (Verma, 2013). Moderated regression analysis is used to detect how variables moderate the nature of a relationship between variables. It enables us to connect the associations between independent and dependent variables to other independent variables (moderators). The moderating effect occurs when the level of the third variable influences the relationship between the independent variables and dependent variables (Hair et al., 2014).

4. Analysis and Discussions

4.1. Validity and Reliability

To assess the suitability of data, Exploratory Factor Analysis (EFA), KMO, and Bartlett's test of sphericity were used in this study. Table 1 shows the results of the KMO and Bartlett's test of sphericity.

Table 1. KMO and Bartlett's test.

Factors	Kaiser-Meyer-Olkin measure of sampling adequacy (KMO)	Bartlett's test of sphericity		
		Chi-square	df	Sig.
Financial knowledge	0.823	756.656	9	0.000
Financial behaviour	0.764	4412.543	33	0.000
Financial attitude	0.674	429.867	16	0.000
Financial decision-making	0.978	2646.656	17	0.000
Parental financial teaching	0.813	362.843	13	0.000

Table 1 showed that the KMO for all factors ranged from 0.674 to 0.978, above 0.60. The p-value of the Bartlett's test for all factors ($p=0.000$) is smaller than 0.05, which is significant. This result is an indication that the correlation structure of construct is adequate to conduct a factor analysis on the items and that all factors are regarded as valid and reliable. Therefore, EFA can be conducted.

Table 2 shows the results of the EFA, reliability by depicting the Cronbach's alphas, and descriptive statistics for the constructs and factors of the study.

Table 2. Validity, reliability, and descriptive statistics results.

Factors Variables	EFA factor loadings CA			Descriptive statistics		
	Items	Highest	Lowest	α	μ	SD
Financial knowledge	7	0.834	0.564	0.845	4.31	1.48
Financial behaviour	5	0.744	0.433	0.756	3.34	1.36
Financial attitude	6	0.913	0.615	0.834	3.65	1.44
Financial decision-making	8	0.836	0.667	0.978	2.86	1.26
Parental financial teaching	6	0.987	0.486	0.946	3.26	1.31

Table 2 indicated that five factors were extracted by the EFA, and all items were loaded onto the factors as expected, with loadings greater than 0.30. The overall factor loadings range from 0.433 to 0.987. The Cronbach's alpha coefficients were above 0.6 and were considered reliable. The descriptive statistics provided the means and standard deviation. Regarding the means, majority of respondents agreed with the statements measuring financial knowledge (4.31), financial attitude (3.65), financial behaviour (3.34), and parental financial teaching (3.26), and disagreed with statements measuring financial decision-making (2.86). The significant standard deviations for each component indicate that the respondents' responses were inconsistent. However, financial knowledge had the highest standard deviation of 1.48, indicating that the statements made by this factor had the widest range of responses. Therefore, the data was prepared and ready for further analysis. Thus, amoderated regression analysis can be performed.

4.2. Moderated Regression Analysis

Table 3 indicates the results of the moderated regression analysis for the effects of *parental financial teaching* and *parental income* on the components of *Financial literacy*, namely *Financial knowledge*, *Financial behaviour*, *Financial attitude*, and *Financial decision-making*.

Table 3. Effects of parental financial teaching and parental income on financial knowledge, financial behaviour, financial attitude, and financial decision-making.

Factors	Financial knowledge β	Financial behaviour β	Financial attitude β	Financial decision-making β
Parental financial teaching	0.587*	0.554*	0.605*	0.173*
Parental income level	0.702*	0.944*	0.949*	0.554*
Parental financial teaching x parental income level	-0.301*	-0.395*	-0.427*	0.058
R	0.751*	0.751*	0.660*	0.434*
R ²	0.564*	0.564*	0.435*	0.188*
F	161.00*	78.50*	56.69*	17.22*

Note: * Significant at $p \leq 0.05$; X indicates interaction.

In terms of the main effects, *Parental financial teaching* acted as a significant predictor of *Financial knowledge* ($\beta = 0.587$; $p \leq 0.05$), *Financial behaviour* ($\beta = 0.554$; $p \leq 0.05$), *Financial attitude* ($\beta = 0.605$; $p \leq 0.05$), and *Financial decision-making* ($\beta = 0.173$; $p \leq 0.05$). *Parental income* acted as a predictor of *Financial knowledge*, *Financial behaviour*, *Financial attitude*, and *Financial decision-making*. In terms of the interaction effects, *Parental income* significantly moderated the relationship of *Parental financial teaching* with *Financial knowledge* ($\beta = -0.301$; $p \leq 0.05$; $R^2 = 0.564$; $F = 161.00$), *Financial behaviour* ($\beta = -0.395$; $p \leq 0.05$; $R^2 = 0.564$; $F = 78.50$), and *Financial attitude* ($\beta = -0.427$; $p \leq 0.05$; $R^2 = 0.435$; $F = 56.69$). However, *Parental income* did not significantly moderate the relationship between *Parental financial teaching* and *Financial decision-making* ($\beta = 0.058$; $p > 0.05$; $R^2 = 0.188$; $F = 17.22$). Furthermore, the interaction effects on *Financial knowledge*, *Financial behaviour*, and *Financial attitude* were small.

Figures 1, 2, and 3 indicate the interaction effects between *parental income*, *parental financial communication*, *financial knowledge*, *financial behaviour*, and *financial attitude*.

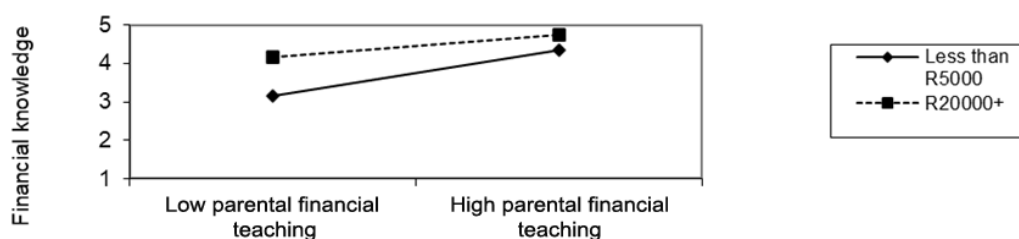


Figure 1. Interaction effects between parental income, parental financial teaching, and financial knowledge.

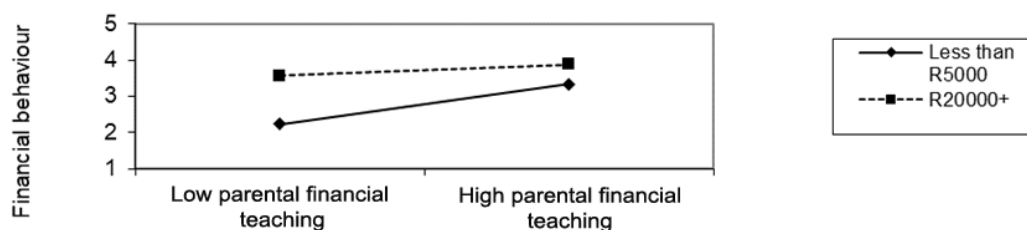


Figure 2. Interaction effects between parental income, parental financial teaching, and financial behaviour.

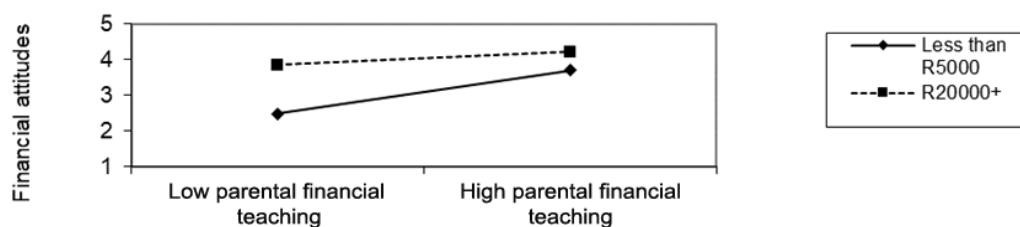


Figure 3. Interaction effects between parental income, parental financial teaching, and financial attitude.

As indicated in Figures 1, 2, and 3, the relationships of *parental financial teaching* with *financial knowledge*, *financial behaviour*, and *financial attitude* were stronger for those whose parents earned more than R20 000+ than for those whose parents earned *Less than R5 000*. Respondents whose parents earned R20 000+ or more achieved significantly higher scores on *financial knowledge*, *financial behaviour*, and *financial attitude*.

Based on the non-significant interaction effects, not all the hypotheses mentioned above were accepted. Table 4 indicates the hypotheses and decisions.

Table 4. Hypotheses decision.

Hypotheses	Decision
H1: The relationship between parental financial teaching and financial knowledge is moderated by parental income	Accept
H2: The relationship between parental financial teaching and financial behaviour is moderated by parental income	Accept
H3: The relationship between parental financial teaching and financial attitude is moderated by parental income	Accept
H4: The relationship between parental financial teaching and financial decision-making is moderated by parental income	Reject

As indicated in Table 4, hypothesis H4 was rejected, as *parental income* did not moderate the relationship between *parental financial teaching* and *financial decision-making*. However, hypotheses H1, H2, and H3 were accepted, as *parental income* moderated the relationship of *parental financial teaching* with *financial knowledge*, *financial behaviour*, and *financial attitude*. As three hypotheses were accepted and one was rejected, it indicates that the relationship between parental financial teaching and financial literacy is moderated by parental SES (income). This is in line with Kamaruddin and Mokhlis (2003) study, which observed a significant relationship between parental SES and financial education. However, it must be noted that Kamaruddin and Mokhlis (2003) did not determine whether parental SES moderates the relationship between parental financial socialisation and financial literacy. This study is among the first to investigate whether the relationship between parental financial teaching and financial literacy is moderated by parental SES.

5. Conclusions

The primary aim of this research was to examine the potential moderating effect of parental socioeconomic status (SES) on the association between parental financial education provided to young black African adults and their level of financial literacy. Financial literacy was measured through financial knowledge, financial behaviour, financial attitudes, and financial decision-making. While parental SES was measured through parental income. A moderated regression analysis was used to test this relationship. Four hypotheses were tested. The results showed that *parental income* did not moderate the relationship between *parental financial teaching* and *financial decision-making*. Furthermore, the results indicated that *parental income* moderated the relationship between *Parental financial teaching* and *Financial knowledge*, *Financial behaviour*, and *Financial attitude*. Thus, three hypotheses were accepted, while one was rejected. Therefore, the overall results indicated that the relationship between parental financial teaching and financial literacy is moderated by parental SES. Thus, parental SES is important in parental financial teaching and financial literacy, and it must be understood better so that it does not hinder financial teaching. This study is amongst the first to investigate whether the relationship between parental financial teaching and financial literacy is moderated by parental SES. Therefore, there is a still need for more studies to be conducted. This study recommends that researchers explore the effect of parental SES on the relationship between parental financial teaching and other components of financial socialisation such as financial discussions, financial monitoring, and financial communication with financial literacy. Furthermore, it is recommended that the government in South Africa come up with initiatives to address and improve parental SES, especially income, as it has been shown that parents with higher incomes are more likely to engage in parental financial teaching, which does affect the financial literacy of young adults.

References

- Adams, J., Khan, H. T. A., & Raeside, R. (2014). *Research methods for business and social science students* (2nd ed.). London: Sage Publications.
- Agabalinda, C., & Isoh, A. V. N. (2020). Moderating effects of social learning on the usage of formal financial services in Kampala, Uganda. *Journal of Economics and International Finance*, 12(3), 120-129.
- Agnew, S. (2018). Empirical measurement of the financial socialisation of children by parents. *Young Consumers*, 19(4), 421-431. <https://doi.org/10.1108/yc-07-2017-00717>
- Alshebami, A. S., & Aldhyani, T. H. (2022). The interplay of social influence, financial literacy, and saving behaviour among Saudi youth and the moderating effect of self-control. *Sustainability*, 14(14), 1-18. <https://doi.org/10.3390/su14148780>
- Ameliawati, M., & Setiyani, R. (2018). *The influence of financial attitude, financial socialization, and financial experience to financial management behaviour with financial literacy as the mediation variable*. Paper presented at the International Conference on Economics, Business and Economic Education. Conference Paper.
- Antoni, X., & Saayman, M. (2021). The influence of financial socialisation mechanisms on young financial professionals' financial literacy levels in the Eastern Cape. *Academy of Accounting and Financial Studies Journal*, 25(3), 1-15.
- Arceo-Gomez, E., & Villagomez, A. (2017). Financial literacy among Mexican high school teenagers. *International Review of Economics Education*, 24(C), 1-17.
- Babbie, E. (2013). *The practice of social science research international edition* (13th ed.). Wadsworth: Cengage Learning.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs New Jersey: Prentice-Hall.
- Batten, G. P. (2015). *Consumer socialisation in families: How parents teach children about spending, saving and importance of money*. PhD Thesis Virginia Polytechnic Institute and State University, Virginia, USA.
- Beal, D., & Delpachitra, S. (2003). Financial literacy among Australian university students. *Economic Papers: A Journal of Applied Economics and Policy*, 22(1), 65-78. <https://doi.org/10.1111/j.1759-3441.2003.tb00337.x>
- Bhandarkar, P. L., & Wilkinson, T. S. (2010). *Methodology and techniques of social research*. Mumbai: Himalaya.
- Buccioli, A., & Veronesi, M. (2014). Teaching children to save: What is the best strategy for lifetime savings? *Journal of Economic Psychology*, 45(C), 1-17. <https://doi.org/10.1016/j.joep.2014.07.003>
- Business, T. (2021). *Here is the age profile of South Africans looking for help with debt*. Retrieved from <https://business.tech.co.za/news/business/465634/heres-the-age-profile-of-south-africans-looking-for-help-with-debt/>
- Chavali, K., Mohan, P., & Ahmed, R. (2021). Does financial behaviour influence financial well-being? *Journal of Asian Finance, Economics and Business*, 8(2), 273-280.

- Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, 11(3), 289-307.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). London: Routledge.
- Delavande, A., Rohwedder, S., & Wills, R. J. (2008). *Retirement planning and the role of financial literacy and cognition*. Working Paper 2008-190. MI Retirement Research Center.
- DeVaney, S. A. (2016). *Financial issues of older adults in: J.J. Xiao, handbook of consumer finance research* (2nd ed.). Zurich: Springer.
- Fan, L., & Park, N. (2021). Factors mediating the association between financial socialisation and well-being of young adults: Testing a conceptual framework. *Journal of Financial Counselling and Planning*, 32(2), 202-216.
- Furnham, A. (1999). The saving and spending habits of young people. *Journal of Economic Psychology*, 20(6), 677-697. [https://doi.org/10.1016/S0167-4870\(99\)00030-6](https://doi.org/10.1016/S0167-4870(99)00030-6)
- Garrison, S. T., & Gutter, M. S. (2010). Gender differences in financial socialisation and willingness to take financial risks. *Journal of Financial Counselling and Planning*, 21(2), 60-83.
- Grable, J. E., Park, J. Y., & Joo, S. H. (2009). Explaining financial management behavior for Koreans living in the United States. *Journal of Consumer Affairs*, 43(1), 80-107. <https://doi.org/10.1111/j.1745-6606.2008.01128.x>
- Grohmann, A., Kouwenberg, R., & Menkhoff, L. (2015). Childhood roots of financial literacy. *Journal of Economic Psychology*, 100(51), 114-133. <https://doi.org/10.1016/j.joep.2015.09.002>
- Gudmunson, C., & Danes, S. (2011). Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues*, 32(4), 644-667. <https://doi.org/10.1007/s10834-011-9275-y>
- Hair, J. F. J., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Harlow: Pearson.
- Homan, H. S. (2015). *Comparative study of student's financial literacy and its demographic factors*. Paper presented at the Paper Presented at the International Conference on Economics and Banking.
- Ismail, I., Rowa, H., Tendean, N., Huseno, T., & Hartati, S. (2022). The effect of financial literature, parents social economic and student lifestyle on students' personal financial management. *International Journal of Entrepreneurship*, 26(2), 1-10.
- Jorgensen, B. L. (2007). *Financial literacy: Parental and peer influences*. MSc Thesis Virginia Polytechnic Institute and State University Virginia, USA.
- Kamaruddin, A. R., & Mokhlis, S. (2003). Consumer socialization, social structural factors and decision-making styles: A case study of adolescents in Malaysia. *International Journal of Consumer Studies*, 27(2), 145-156. <https://doi.org/10.1046/j.1470-6431.2003.00297.x>
- Kim, J., Gutter, M. S., & Spangler, T. (2017). Review of family financial decision making: Suggestions for future research and implications for financial education. *Journal of Financial Counseling and Planning*, 28(2), 253-267. <https://doi.org/10.1891/1052-8073.28.2.253>
- Kolodziej, S., Lato, K., & Szymanska, M. (2014). The role of parental influences on the economic socialisation of children. *Problems of Education in the 21st Century*, 58, 99-107. <https://doi.org/10.33225/pec/14.58.99>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature*, 52(1), 5-44. <https://doi.org/10.3386/w18952>
- Mandell, L. (2008). *The financial literacy of young American adults*. Retrieved from www.jumpstart.org/assets/files/2008SurveyBook.pdf
- Mayer, R. N., Zick, C. D., & Marsden, M. (2011). Does calculating retirement needs boost retirement savings? *Journal of Consumer Affairs*, 45(2), 175-200. <https://doi.org/10.1111/j.1745-6606.2011.01199.x>
- Mitchell, O. S., & Lusardi, A. (2015). *Financial literacy and economic outcomes: Evidence and policy implications*. Retrieved from Pension Research Council Working Papers: WP2015-1: <https://pensionresearchcouncil.wharton.upenn.edu/wp-content/uploads/2015/08/WP2015-01.pdf>
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In (pp. 47-59). London: Cambridge: MIT Press.
- Morton, J. S. (2005). The interdependence of economic and personal finance education. *Social Education*, 69(2), 66-70.
- Norvilitis, J. M., & MacLean, M. G. (2010). The role of parents in college students' financial behaviours and attitudes. *Journal of Economic Psychology*, 31(1), 55-63. <https://doi.org/10.1016/j.joep.2009.10.003>
- OECD. (2017). *Measuring financial literacy*. Retrieved from <http://www.oecd.org/finance/financial-education/measuringfinancialliteracy.htm>
- Petpairote, W. (2023). Financial skill and self-control affecting the saving behaviour of income earners in Thai municipalities. *International Journal of Innovative Research and Scientific Studies*, 6(1), 64-71. <https://doi.org/10.53894/ijriss.v6i1.1089>
- Radianto, W. E. D., Efrata, T. C., & Dewi, L. (2019). Impact of family's socio-economic context on financial literacy of young entrepreneurs. *Expert Journal of Business and Management*, 7(2), 230-235.
- Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*, 7(1), 1-18. <https://doi.org/10.1186/s43093-021-00099-0>
- Ramalho, T. B., & Forte, D. (2019). Financial literacy in Brazil — do knowledge and self-confidence relate with behaviour? *Management Journal*, 54(1), 77-95. <https://doi.org/10.1108/rausp-04-2018-0008>
- Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276-295. <https://doi.org/10.1111/j.1745-6606.2010.01169.x>
- Respati, D. K., Widyastuti, U., Nuryati, T., Musyaffi, A. M., Handayani, B. D., & Ali, N. R. (2023). How do students' digital financial literacy and financial confidence influence their financial behavior and financial well-being? *Nurture*, 17(2), 40-50. <https://doi.org/10.55951/nurture.v17i2.154>
- Robb, C. A., & Woodyard, A. (2011). Financial knowledge and best practice behaviour. *Journal of Financial Counselling and Planning*, 22(1), 60-70.

- Serido, J., LeBaron, A. B., Li, L., Parrott, E., & Shim, S. (2020). The lengthening transition to adulthood: Financial parenting and recentering during the college-to-career transition. *Journal of Family Issues*, 41(9), 1626-1648. <https://doi.org/10.1177/0192513x19894662>
- Serido, J., Shim, S., Mishra, A., & Tang, C. (2010). Financial parenting, financial coping behaviors, and well-being of emerging adults. *Family Relations*, 59(4), 453-464. <https://doi.org/10.1111/j.1741-3729.2010.00615.x>
- Sherraden, M. S. (2013). *Building blocks of financial capability*. New York: Oxford University Press.
- Shim, S., Barber, B. L., Card, N. A., Xia, J. J., & Serido, J. (2010). Financial socialisation of first-year college students: The roles of parents, and education. *Journal of Youth and Adolescence*, 39(12), 1457-1470. <https://doi.org/10.1007/s10964-009-9432-x>
- 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. <https://doi.org/10.1016/j.appdev.2009.02.003>
- Siegfried, C., & Wuttke, E. (2021). What influences the financial literacy of young adults? A combined analysis of sociodemographic characteristics and delay of gratification. *Frontiers in Psychology*, 12, 1-14. <https://doi.org/10.3389/fpsyg.2021.663254>
- Sirsch, U., Zupančič, M., Poredoš, M., Levec, K., & Friedlmeier, M. (2020). Does parental financial socialization for emerging adults matter? The case of Austrian and Slovene first-year university students. *Emerging Adulthood*, 8(6), 509-520. <https://doi.org/10.1177/2167696819882178>
- Struwig, J., Roberts, B., & Gordon, S. (2018). *Financial literacy in South Africa*. Pretoria: Human Sciences Research Council.
- Supanantarook, S., Lensink, R., & Hansen, N. (2017). The impact of social and financial education on savings attitudes and behavior among primary school children in Uganda. *Evaluation Review*, 41(6), 511-541. <https://doi.org/10.1177/0193841x16665719>
- Van Campenhout, G. (2015). Revaluing the role of parents as financial socialization agents in youth financial literacy programs. *Journal of Consumer Affairs*, 49(1), 186-222. <https://doi.org/10.1111/joca.12064>
- Verma, J. P. (2013). *Data analysis in management with SPSS software*. New Delhi: Springer.
- Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, 1(2), 1-14.
- Webley, P., & Nyhus, E. K. (2013). Economic socialization, saving and assets in European young adults. *Economics of Education Review*, 33, 19-30. <https://doi.org/10.1016/j.econedurev.2012.09.001>
- Xu, Y., & Yao, R. (2022). Financial decision-making responsibility and household wealth accumulation among older adults: A comparative advantage perspective. *Journal of Financial Counselling and Planning*, 33(1), 3-23. <https://doi.org/10.1891/jfcp-19-00075>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York: Harper and Row.