FINANCIAL LITERACY, FINANCIAL SOCIALIZATION AND SELF-EFFICACY: NEED FOR EDUCATION AND PRACTICE OPPORTUNITIES

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Inspiration to pursue the Study:

Living among the university community as a financial management lecturer, I am confronted with the realities, challenges, and experiences and expectations of students. The very mention of the word 'finance', or 'financial management' is intimidating enough to many students, as if we are zooming into their troubled financial position, or they are reliving their high school mathematical woes.

More researchers have emphasized the importance of financial literacy and personal finance education, including researchers in South Africa; however, it is a struggle to find public higher education institutions and basic education institutions that offer personal financial management as part of their curriculum. The question is where and how can the students acquire the knowledge and skill to effectively manage their financial affairs for the betterment of the quality of their lives, let alone guiding and nurturing the implementation of that knowledge.

Literature reviews and researchers have focused on individual aspects of financial management education and financial literacy. As a result, the three necessary spheres, namely, financial literacy, financial intelligence, and self-efficacy, have been neglected. It is the intention of this study to narrow that gap.

Financial literacy

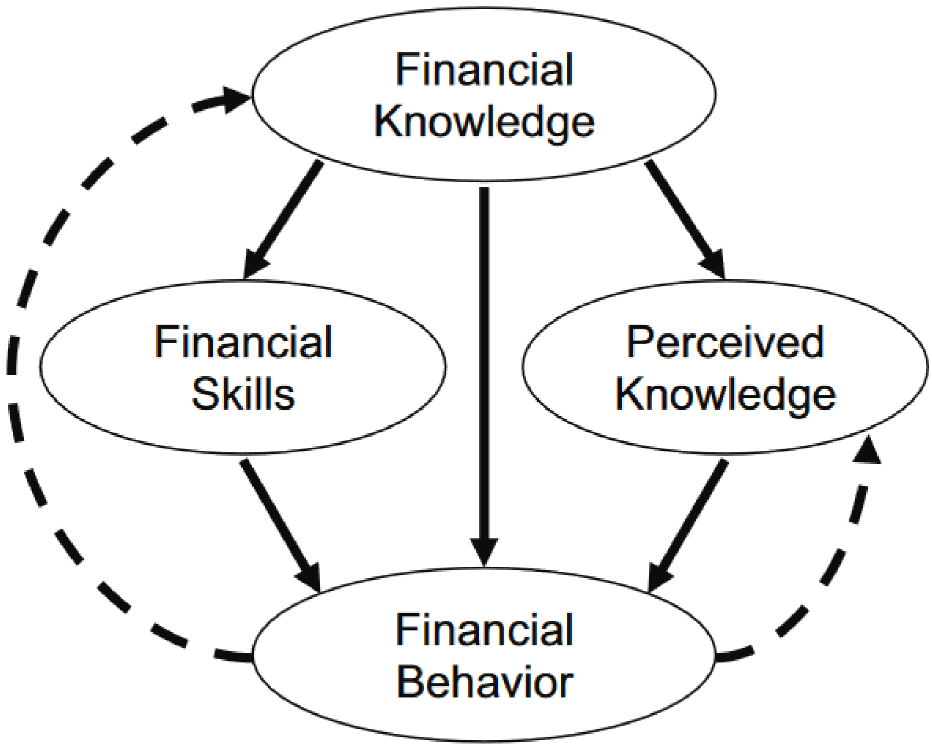
Financial literacy is a real challenge to many young people worldwide, as they struggle with the basics such as budgeting, saving, compound interest, money, and debt management to navigate their day-to-day activities (Visano and Ek-Udofia, 2017; Navickas, Gudaitis and Krajnakova, 2014).

Lower levels of financial literacy of household, students and young adults have been documented in different countries (Bucher-Koenen, Lusardi, Alessie and Van Rooij, 2017;

Bağci and Kahraman, 2020; Leone and Thompson, 2023); however South Africans, particularly students and women, are amongst those with the lowest levels of financial literacy (Nanziri and Leibbrandt, 2018; Wilkinson, et.al 2017).

The term 'financial literacy' is used by different authors in the literature as the basic knowledge about financial products, and the skills, and abilities to calculate relevant transactions such as budgeting, savings, compound and ordinary interest, time value of money, inflation, and debt management in order to make sound financial decisions (Matemane, 2018; Xu and Zia, 2012).

Figure 1. Conceptual Model of Financial Literacy



Adapted composite definition of financial literacy that builds on those given by PACFL (2008) and various researchers.

The impact of various public and private institutions that have tried to improve financial literacy, to enable young people to make sound and informed decisions, have yield minimal results (Belousova, Gryzenkova, Kirillova, Vasyakin and Pozharskaya, 2019; Frijns, Gilbert and Tourani-Rad, 2014; Louw, Fouche and Oberholzer, 2013; Fisch, Lusardi and Hasler, 2019).

As students have limited access to financial resources, they suffer exclusion from active participation in the financial markets and their financial products (Akande, Hosu, Kabiti, Ndhleve and Garidzirai, 2023). Different researchers have assigned and categorised financial management education according to the study focus areas. For example, De Moor and Verschetze (2017) and Sawatzki and Sullivan (2017) emphasise that financial management education must begin from childhood, taught by passionate teachers, who have capacity and the willingness to teach the subject.

Parents and guardians, as primary caregivers, must shoulder the responsibility of ensuring that their children are financially literate, as well as nurturing their children's financial behaviour (Ameliawati and Setiyani, 2018; Antoni, Rootman and Struwig, 2019).

Indeed, parents and guardians, through their own financial knowledge and attitudes, must model and influence their children's financial behaviour, the levels of debt they engage in and the maintenance thereof, as well as providing access to the economic resources needed to practice money management skills (Moreno-Herrero, Salas-Velasco, and Sánchez-Campillo, 2018; Afsar, Chaudhary, Iqbal and Aamir, 2018).

According to Lusardi and Michel (2014), Esmail Alekam and Bt Md Salleh (2018), and Ho and Lee (2023), parental encouragement and involvement, especially by mothers, in their children's financial education nurtures students' financial well-being even more than their social status. The hindrance, however, may be that many families regard money matters as private, and they do not discuss it with their children (Beck and Garris III, 2019).

Some of the mistaken attitudes that children may inherit from their traditional parents, whose attitudes about gender roles differ; for example, believing that a female's roles and career path must be different from those of male children (Kim, 2021).

Traditional parents may be patriarchal in teaching their children, consequently being biased against female children by focusing their teaching towards caregiving opportunities; while financial management teachings and the breadwinning role will favour male children to open up their economic status (LeBaron, Holmes, Jorgensen, and Bean, 2020). The confidence of female college students will thus be eroded compared to males, and their enthusiasm about financial topics and mathematical abilities is hampered by such prejudice (Bottazzi and Lusardi, 2021; Noor, Batool and Arshad, 2020). No wonder female students take into their adult life lower self-esteem with a lower contribution and involvement in significant household financial decision-making (Kim, Gutter and Spangler, 2017).

As the returns on investment in financial management education are yet to be fully realized, fewer and fewer young adults possess satisfactory levels of knowledge about financial transactions such as interest rate calculations, the impact of inflation impact on money, debt, and risk diversification, including other financial market concepts (Anantanasuwong, 2022; De Villiers, 2013). While students are traveling the journey of trial and error towards self-discovery, studies from Wrottesley (2016), and Bhatia, Chawla and Singh (2021) blame parents for failing to effectively teach the students about money management.

LeBaron, Holmes, Jorgensen, and Bean, (2020) are sympathetic to the situation, thus recommending that financial educators should involve and educate parents in conjunction with teaching students, as a gesture of support to guide the methods which parents can adopt when teaching their children about money matters.

In a tertiary institution environment where financial management or literacy is taught to undergraduate students, De Moor and Verschetze (2017), Sawatzki and Sullivan (2017), and Mardikaningsih and Darmawan (2023) recommend that where students might have missed the opportunity to learn financial management from childhood, the curriculum must be made relevant to students' backgrounds and the circumstances in which they live (economically and socially).

Practical financial literacy skills are important and necessary for today's generation, as without them, the youth is facing a bleak and depressing future (Saravanakumar, 2020; Raudebaugh, Finlayson, Norman, and Stewart, 2022).

Blending financial management education using a life-skills approach may create an interest in the subject and raise the students' confidence level to try and apply the teachings in their real-life situations (Arofah, 2019; Nisraeni, Riyadi, and Triana, 2023). The approach requires astute teachers, who are knowledgeable, willing, and able to create an interest in the subject matter, to prepare students not only to face and enhance their university academic demands but also to make informed decisions in a variety of financial situations for their future well-being.

Financial intelligence

Financial intelligence is an educational method that differs from traditional financial literacy by encompassing the mechanical aspects of money, but which also includes the emotional and cognitive components which significantly mediate the relationship between social capital, financial wellbeing, and overall financial performance (Herman and Gupta, 2020; Yao and Meng, 2022).

Financial intelligence is a purposeful learning that is focusing on specific learning areas (Zhuo, 2022; Zhang, 2022). Utomo (2020) and Sari, Fatimah and Suyanto, (2017) divide the study of financial intelligence study into two parts, namely, the aspects of economic literacy and the financial literacy aspect. Economic literacy includes basic economic lessons in general, such as the economic issues, national income, markets, and so on, while financial literacy includes knowledge of finances, which encompasses financial institutions and the Financial Services Authority, the needs and wants, earnings and spending, saving, and share systems and instruments, inflation, price indexes, and the capital market (Utomo, 2020; Yao and Meng, 2022).

Another aspect of financial intelligence is the practice and continued knowledge application to improving performance, measured by how individual actions impact on the overall performance for ultimate overall success (Berman and Knight, 2013; Treptow, 2014). Financial intelligence "educates the reader on the art of finance in an approachable and enjoyable way" (Treptow 2014: 174).

According to Berman and Knight (2013), financial intelligence can be summarized as a set of four distinct skills that can be learned, and they are summarized as follows:

- Financially intelligent people understand the foundation and the basics of financial measurement and are not intimidated by numbers; neither are they puzzled by numbers. They understand that finance and accounts are art and science at the same time in themselves. These disciplines must rely on the rules, estimates and assumptions to try to quantify what at time cannot be quantified. Financially intelligent people have the ability to identify where the artful aspects of finance can be applied to the numbers and are aware that when this art is applied differently, it might lead to different conclusions. They must be willing to challenge and question numbers when the need arises.

- Because they have the foundation and appropriation of the art of finance the numbers can be analyzed in depth and the financially intelligent people are able to analyze return on investments and ratios and are able to make informed decisions from those numbers.

- They need to understand the big picture and put in place facts that help others make sense of the numbers, for better interpretation. The use of technologies must embrace all aspects of finance and how they should be interpreted in decision-making. Financial intelligence and finance management, like most disciplines and skill sets, in addition to being learned, *must also be practiced and applied.* People need to understand the what, why, and how of the numbers.

Greater financial literacy and financial intelligence help people to feel more committed and involved when dealing with finances or money matters (Berman and Knight, 2013; Ishmuhametov, and Kuzmina-Merlino, 2017).

Financial Self efficacy

Self-efficacy is frequently used in behavioural studies which are aimed at predicting individual achievement in fields such as education or teaching (Caprara et al. 2011). The term denotes the abilities that motivate individuals to confidently manage their lifetime events, in environments such as investments, education, or illness, especially when not excluded financially from a particular environment (Matheka, Jansen, and Hofman, 2020). In an academic environment, self-efficacy is when an individual perceive himself or herself as competent, possesses self-control, and is able to perform academically (Wang, Guo, Song, Hao, and Qiao, 2022). Financial self-efficacy partially mediates the effect of financial literacy on financial well-being.

It is considered a true mediator in the relationship between many variables, for example, financial literacy and financial well-being and the execution of desired action in a particular domain (Lone and Bhat, 2022). The predictive superior power possessed within a self-efficacy environment influence the individual's task or choice directly when it is domain-specific, and the frequently perceived positive outcome will be ultimately realized (Noor, Batool and Arshad, 2020)

According to Shim, Serido and Lee (2019), self-efficacy is the specific belief that any correlations could help to elucidate the degree of influence imposed by a young adult's ability to solve problems, and establish a definite link between these two self-agency factors and the young adult's mental outcome: for example, by reducing situation-specific stress.

Why the study is necessary:

Many students and the young people need financial literacy to ease the common ill-informed decisions and lack of competencies in financial decisions resulting in loan burden they carry into their careers (Lusardi and Michell, 2017; Lusardi and Mitchell, 2023; Salas-Velasco, Moreno-Herrero and Sánchez-Campillo, 2021). Generally, researchers present South Africans as a consuming nation with a poor saving culture (Koloba, 2018). The country is faced with high levels of consumer debt, low saving rates, widespread fraudulent financial schemes, and high product service and penalty fees (Mudzingiri, Muteba Mwamba and Keyser, 2018). On average people with low financial literacy tend to engage in expensive borrowing, and have high default rates (Lusardi and Tufano, 2015; Artavanis and Karra, 2021).

Students are vulnerable to making decisions that are uninformed and which carry heavy a debt burdened. They are also vulnerable to imprudent spending, which has the potential of producing negative effects on the individual level, the society as well as the country's economy (van Deventer and de Klerk, 2017).

The results may be consequential to the country's below-average levels of financial literacy, its training failure, or fragmented financial education systems that do not impact competencies (Salas-Velasco, Moreno-Herrero and Sánchez-Campillo, 2021; Batala, 2022; Louw, Fouche and Oberholzer, 2013). The World Bank surveys also portrayed South Africans, many of whom are middle working class, to be among the biggest borrowers in the world, where 86% of the population hold some form of debt, and have one of the largest household debt-to-GDP ratios in the world, at 36% (Torkelson, 2020; Ndlovu-Gatsheni, 2017). The majority of the South African population is black, and this represent a group that is vulnerable to socio-economic settings that would not have allowed them to have acquired financial literacy at home or as students (Sabi, 2021). Tuition costs and escalating debt levels that are unaffordable to students are becoming a threat to their access to education and completion of their studies (Matukane and Bronkhorst, 2017; Mabuza, 2020; Ramavhea, Fouché, and Van Der Walt, 2017).

The majority of the historically disadvantaged groups of students are beneficiaries of government funding through NSFAS. The overall proportion of funding of students in public institutions is estimated to be 69%, although in one institution, the total proportion of NSFAS beneficiaries was estimated to be 96% (Branson, Ranchhod, and Whitelaw, 2023).

Much as many black students depend on NSFAS to access higher education, universities across the country feel that the funding was inadequate to cater for the growing number of beneficiaries, and funding challenges threaten to run universities into bankruptcy (Matukane and Bronkhorst, 2017).

Students' educational debt is probably the major contribution to this debt, irrespective of government's high investment in student financial aid schemes, such as the National Student Financial Aid Scheme (NSFAS) (Maseko, Oberholzer and Middelberg, 2020). Students need financial education to be able to address the possible downward spiral trajectory of debt, moving forward (Sarpong-Danquah, Gyimah, Poku and Osei-Poku, 2018).

The country has lately popularized social grants for recipients, who may be categorized amongst the informal income beneficiaries, and those who may not want to work (SO-OABEB, 2019). They are assumed to be less interested in financial literacy education and savings, and would further score the least as compared to those earning an income from formal sources, who present higher levels of financial literacy, score higher in knowledge, and save more (Nanziri, and Leibbrandt, 2018; Morgan and Long, 2020).

The significance of the proposed study

Implementing interventions in public and private institutions on financial literacy has yielded little results, and yet it is a necessity to make informed financial decisions (Ludick, 2022; Millen and Stacey, 2022).

Despite various financial literacy interventions being implemented by private and public institutions in South Africa, the level of financial literacy and competencies are still low. Higher education is an expensive process, both financially and emotionally (McMichael, Lee IV, Fallon, Matusko and Sandhu, 2022); hence it is necessary to strengthen financial literacy education in order to minimize the challenges that students face.

An urgent intervention is necessary in the method of teaching financial literacy, to include financial intelligence and self-efficacy simultaneously, as lifelong learning. The historical traditional individualist approach has proven to be ineffective in impacting the financial behaviour of students. The approach may have had unintended consequences and derailed the achievement of the desired investment outcome of improved literacy levels of students. Without a doubt, financial literacy, which is knowledge acquisition; and financial intelligence, representing the coordination of specific activities in tune with building students' confidence levels with the necessary resources and skills to bring about effective day-to-day decision-making to improve the economic status of students, must be a priority.

To have an effective and efficient financial management education, with the prospect of successful application, necessitates the development of a "Wholistic all-encompassing model" to deal with financial education, to bring the hope of acquiring value-for-money investment returns from the large sums of money invested in financial management education. The holistic approach method with specific guidelines will narrow the gaps and allow early intervention when necessary for better achievement.

Possible research questions

1. At what level of their studies are students introduced to financial literacy education and its relevance to their behaviour?
2. What instrument will be used to determine the impact of financial literacy education on financial behaviour?
3. Will financial literacy, financial intelligence, and self-efficacy impact finance education positively in helping students to make informed and efficient financial decisions?

Possible research method

Primary data will be collected from undergraduate students in a selected university using a quantitative collection method. Survey questionnaire will be adopted from existing literature, including additional questions assumed to be necessary by the researcher for the study. The questionnaire will be posted online.

Students will be asked to voluntarily respond to the questionnaire and save their responses online. A link will automatically save the students' responses after completing the questionnaires. The suggested platform would allow an online distribution site for students, which could be QuestionPro system or any online assessment platforms that will be available to the researcher at the time of collecting data.

A five (5) point Likert scale will be used where level 5 level would represent the student totally agrees with the statement, and level 1 representing totally disagrees, will be used to select the most appropriate response from a list of predetermined possible responses.

A quantitative analysis software that is available under the licence and approved of under which the student will be registered. This will be outlined in detail when the formal proposal is written if my concept paper is accepted.

References

Akande, J.O., Hosu, Y.S., Kabiti, H., Ndhleve, S. and Garidzirai, R., 2023. Financial literacy and inclusion for rural agrarian change and sustainable livelihood in the Eastern Cape, South Africa. *Heliyon*, *9*(6).

Ameliawati, M. and Setiyani, R., 2018. The influence of financial attitude, financial socialization, and financial experience to financial management behavior with financial literacy as the mediation variable. KnE Social Sciences, pp.811-832.

Antoni, Z.L., Rootman, C. and Struwig, F.W., 2019. The influence of parental financial socialisation techniques on student financial behaviour. *International Journal of Economics and Finance Studies*, *11*(2), pp.72-88.

Arofah, A.A., 2019. Financial literacy, self-efficacy, and financial behaviour of college students. *International Journal of Pedagogy and Teacher Education*, *3*(2), pp.129-138.

Artavanis, N. and Karra, S., 2021. Financial literacy and student debt. In *Financial Literacy and Responsible Finance in the FinTech Era* (pp. 86-105). Routledge.

BAĞCI, H. and KAHRAMAN, Y.E., 2020. The effect of gender on financial literacy. *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, *4*(4), pp.492-503.

Batala, L., 2022. The Buzz Around Access to Financial Services by Individuals. *The Thinker*, *92*(3), pp.70-84.

Beck, J.J. and Garris III, R.O., 2019. Managing personal finance literacy in the United States: A case study. *Education Sciences*, *9*(2), p.129.

Belousova, T.A., Gryzenkova, Y.V., Kirillova, N.V., Vasyakin, B.S. and Pozharskaya, E.L., 2019. The financial literacy assessment among students majoring in the field of finance. *EurAsian Journal of BioSciences*, *13*(1).

Branson, N., Ranchhod, V. and Whitelaw, E., 2023. South African student retention during 2020: Evidence from system wide higher education institutional data.

Clark, T., Hordósy, R. and Vickers, D., 2019. 'We will never escape these debts': Undergraduate experiences of indebtedness, income-contingent loans and the tuition fee rises. *Journal of Further and Higher Education*, *43*(5), pp.708-721.

Cude, B.J., 2021. Defining financial literacy. *The Routledge handbook of financial literacy*, pp.5-17.

De Moor, L. and Verschetze, L., 2017. Student teachers' capacity and willingness to teach financial literacy in Flanders. *Journal of Financial Counselling and Planning*, *28*(2), pp.313-321.

Esmail Alekam, J.M. and Bt Md Salleh, M.S., 2018. The effect of family, peer, behavior, saving and spending behavior on financial literacy among young generations. *International Journal of Organizational Leadership*, *7*, pp.309-323.

Fisch, J.E., Lusardi, A. and Hasler, A., 2019. Defined contribution plans and the challenge of financial illiteracy. *Cornell L. Rev.*, *105*, p.741.

Frijns, B., Gilbert, A. and Tourani-Rad, A., 2014. Learning by doing: The role of financial experience in financial literacy. *Journal of Public Policy*, *34*(1), pp.123-154.

Herman, M. and Gupta, R., 2020. FINANCIAL INTELLIGENCE.

Ho, C.S.M. and Lee, D.H.L., 2023. Financial literacy: The impact of the foreign-language effect on risk-taking values, financial attitudes, and behavior of Hong Kong secondary students. *The Asia-Pacific Education Researcher*, *32*(4), pp.485-496.

Ishmuhametov, I. and Kuzmina-Merlino, I., 2017. What motivates a learner manager of a logistic company to achieve financial literacy?. *Procedia Engineering*, *178*, pp.76-84.

Kim, J., 2021. *Buffers and Barriers to Female First-Generation Students' Career Development* (Doctoral dissertation, The University of Iowa).

Koloba, H.A., 2018. Access To Credit and Saving Behaviour of Generation Y Students. Are we Educating an over-Indebted Generation?. *International Journal of Economics and Finance Studies*, *10*(1), pp.50-65.

Leone, V. and Thompson, P., 2023. Financial literacy and advice perceptions among UK higher education students: an ethnicity tale?. *Review of Economics of the Household*, pp.1-73.

Lone, U.M. and Bhat, S.A., 2022. Impact of financial literacy on financial well-being: a mediational role of financial self-efficacy. *Journal of Financial Services Marketing*, pp.1-16.

Louw, J., Fouche, J. and Oberholzer, M., 2013. Financial literacy needs of South African third-year university students. *International Business & Economics Research Journal (IBER)*, *12*(4), pp.439-450.

Ludick, A., 2022. *Developing a framework of indicators to measure the impact of financial literacy interventions: a South African University case study* (Doctoral dissertation, North-West University (South Africa)).

Lusardi, A. and Mitchell, O.S., 2014. The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature, 52*(1), pp.5-44.

Lusardi, A. and Mitchell, O.S., 2023. *The Importance of Financial Literacy: Opening a New Field* (No. w31145). National Bureau of Economic Research.

Lusardi, A., & Tufano, P. (2015). Debt literacy, financial experiences, and over-indebtedness. *Journal of Pension Economics & Finance, 14*(4), 332-368. doi:10.1017/S1474747215000232
Lusardi, A., Mitchell, O.S. & Curto, V., 2009, *Financial literacy among the young: Evidence and implications for consumer policy*, NBER Working Paper No. 15352, National Bureau of Economic Research, Cambridge, MA.

Lusardi, A., 2015. Financial literacy skills for the 21st century: Evidence from PISA. *Journal of consumer affairs*, *49*(3), pp.639-659.

Mabuza, N.H., 2020. Dropout causes of students funded by the national student financial aid scheme in South African universities.

Maseko, G.J., Oberholzer, M. and Middelberg, S.L., 2020. Perspectives of university students on their student debt accountability. *Southern African Journal of Accountability & Auditing Research*, *22*.

Matemane, M.R., 2018. Saving for tomorrow: does the level of financial literacy in the South African working class matter?. *Southern African Business Review*, *22*(1).

Matukane, M.M. and Bronkhorst, S., 2017. Student funding model used by the National Student Financial Aid Scheme (NSFAS) at universities in South Africa.

McMichael, B., Lee IV, A., Fallon, B., Matusko, N. and Sandhu, G., 2022. Racial and socioeconomic inequalities in the financial stress of medical school. *MedEdPublish*, *12*.

Millen, A. and Stacey, A., 2022. Financial literacy in South African healthcare professionals: an unmet need in health professions education. *South African Journal of Higher Education*, *36*(3), pp.123-142.

Morgan, P.J. and Long, T.Q., 2020. Financial literacy, financial inclusion, and savings behavior in Laos. *Journal of Asian Economics*, *68*, p.101197

Mudzingiri, C., Muteba Mwamba, J.W. and Keyser, J.N., 2018. Financial behavior, confidence, risk preferences and financial literacy of university students. Cogent Economics & Finance, 6(1), p.1512366.

Nanziri, E.L. and Leibbrandt, M., 2018. Measuring and profiling financial literacy in South Africa. *South African Journal of Economic and Management Sciences*, *21*(1), pp.1-17.

Navickas, M., Gudaitis, T. and Krajnakova, E., 2014. Influence of financial literacy on management of personal finances in a young household. *Business: theory and practice*, *15*(1), pp.32-40.

Ndlovu-Gatsheni, S. J. (2017). Why are South African Universities sites of struggle today?. From https://ujcontent.uj.ac.za/esploro/outputs/journalArticle/Why-are-South-AfricanUniversities-sites/9910521707691#f

Nisraeni, N., Riyadi, R. and Triana, D.D., 2023, June. Financial literacy and students' desire to have it: Literature review. In *International Conference on Indigenous Psychology and Culture* (Vol. 1, No. 1, pp. 299-303).
Ramavhea, G., Fouché, J. and Van Der Walt, F., 2017. Financial literacy of undergraduate students–a case study of a public university in South Africa. *International Journal of Economics and Finance Studies*, *9*(2), pp.48-65.

Rasoaisi, L. and Kalebe, K.M., 2015. Determinants of financial literacy among the National University of Lesotho students. *Asian Economic and Financial Review*, *5*(9), p.1050.

Raudebaugh, C., Finlayson, M., Norman, K. and Stewart, S., 2022. Life Skill Needs of Occupational Therapy Assistant Students: Perceptions of Instructors, Preceptors, Graduates and Current Students. *Journal of Occupational Therapy Education*, *6*(3), p.3.

Sabi, S.C., 2021. Poverty, Compromised Dietary Intake and Health Implications among South Africa's Sub-Populations: A Conceptual Analysis. *Lifestyle and Epidemiology: The Double Burden of Poverty and Cardiovascular Diseases in African Populations*, p.29.

Salas-Velasco, M., Moreno-Herrero, D. and Sánchez-Campillo, J., 2021. Teaching financial education in schools and students' financial literacy: A cross-country analysis with PISA data. *International Journal of Finance & Economics*, *26*(3), pp.4077-4103.

Saravanakumar, A.R., 2020. *Life skill education through lifelong learning*. Lulu. com.

Sari, R.C., Fatimah, P.R. and Suyanto, 2017. Bringing voluntary financial education in emerging economy: Role of financial socialization during elementary years. *The Asia-Pacific Education Researcher*, *26*, pp.183-192.

Sawatzki, C. and Sullivan, P., 2017. Teachers' Perceptions of financial literacy and the implications for professional learning. *Australian Journal of Teacher Education (Online)*, *42*(5), pp.51-65.

Shim, S., Serido, J. and Lee, S.K., 2019. Problem-solving orientations, financial self-efficacy, and student-loan repayment stress. *Journal of Consumer Affairs*, *53*(3), pp.1273-1296.

So-Oabeb, J.H., 2019. *Critical Analysis on The Inclusive Schooling Practices for Learners With Poor Socioeconomic Backgrounds and The Challenges They Face At Paresis Secondary*

School In The Otjiwarongo Education Circuit (Doctoral Dissertation, University of South Wales).

Torkelson, E. (2020). Collateral damages: Cash transfer and debt transfer in South Africa. World Development, 126, 104711.

Treptow, E., 2014. Financial Intelligence: A Manager's Guide to Knowing What the Numbers Really Mean by Karen Berman and Joe Knight with John Case: Boston, MA: Harvard Business Review Press, 2013, 304 pp., $27.00, ISBN 978-1-4221-4411-4.

Utomo, P., 2020. The Effect of Economic Literacy, and Financial Literacy on Financial Intelligence Students of Entrepreneur Campus Memorizing Al-Qur'an (KEPQ). *IJEBD (International Journal of Entrepreneurship and Business Development)*, *3*(4), pp.362-369.

van Deventer, M. and de Klerk, N., 2017. FINANCIAL LITERACY AMONGST AFRICAN GENERATION Y STUDENTS: AN EMPIRICAL ANALYSIS OF SELECTED DEMOGRAPIC FACTORS. *International Journal of Economics and Finance Studies*, *9*(1), pp.235-251.

Visano, B.S. and Ek-Udofia, I., 2017. Inclusive financial literacy education for inspiring a critical financial consciousness: An experiment in partnership with marginalised youth. *International Journal of Inclusive Education*, *21*(7), pp.763-774

Wilkinson, A., Pettifor, A., Rosenberg, M., Halpern, C.T., Thirumurthy, H., Collinson, M.A. and Kahn, K., 2017. The employment environment for youth in rural South Africa: A mixed-methods study. *Development Southern Africa*, *34*(1), pp.17-32.

Xu, L. and Zia, B., 2012. Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward. *World Bank Policy Research Working Paper*, (6107).

Yao, L. and Meng, D., 2022. Role of social capital and financial wellbeing in reaching successful entrepreneurial financial performance: a moderated-mediated model of financial intelligence. *Frontiers in Psychology*, *13*, p.843501.

Zhang, Y., 2022, May. Influence of Accounting Information on Financial Management Projects in Intelligent Information Environment based on Smart Data Mining. In *2022 International Conference on Applied Artificial Intelligence and Computing (ICAAIC)* (pp. 714-717). IEEE.

Zhuo, J., 2022. Analysis of Enterprise Financial Management under the Trend of Intelligent Accounting. *Learning & Education*, *10*(9), pp.41-43.