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Financial Knowledge of Students in Open Distance Learning Institution in South Africa

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ABSTRACT

Proficient financial knowledge and judicious decision-making are crucial in the financial decision-making process. This study examined the financial literacy of students enrolled in a higher certificate programme at the College of Economic and Management Sciences (CEMS) at the University of South Africa (UNISA), an open distance learning (ODEL) institution in South Africa. This study employed quantitative research methodology via an online questionnaire for data collection. The findings demonstrated a significant degree of financial literacy among students in ODEL University in South Africa. The study uniquely contributed to the existing knowledge by elucidating the extent of financial literacy among students. This study advocates for students in ODEL institutions to actively apply their financial knowledge, enhance their financial management skills, and make prudent financial decisions. Finally, the study offered recommendations and proposals for subsequent research.

1. Introduction

The 2008 global financial crisis contributed to the heightened focus on financial literacy, underscoring the significance of financial understanding for consumers (Moolman, 2019:20). Financial literacy is essential as it provides pupils with skills in budgeting, personal finance, and the time value of money. Financial literacy is a crucial element of prudent financial decision-making, and numerous young individuals aspire to enhance their financial acumen (Lusardi, Mitchell & Curto, 2010). Enhancing the financial literacy of individuals, particularly university students, is crucial for fostering positive cash management behaviours prior to their entry into the workforce (Ansong & Gyensare, 2012:127). Individuals with financial literacy understand business-related financial concepts including debts, savings, insurance and investment which ensure the good performance of their business (Chenge & Bwana, 2025; Maitima & Munene, 2024).

Typically, financially literate students allocate a greater portion of their funds towards durable goods, including housing, education, and investments, rather than on food, clothing, and other luxury items (Obagbuwa & Kwenda, 2020:28). Recent years have seen a rise in outstanding student debt and loan defaults, prompting worries about the net worth of higher education outcomes and the ramifications of excessive indebtedness for young borrowers (Mueller & Yannelis, 2018). These results underscore the significance of financial literacy for young adults, who are particularly susceptible to financial errors (Artavanis & Karra, 2020:282). Research on financial literacy in underdeveloped nations, including South Africa, particularly among certain demographics, remains limited (Wingfield, 2016: 2). The limited studies conducted yielded incongruous findings on the extent of financial knowledge (Wingfield, 2016: 2).

Individuals must possess financial knowledge for making informed financial decisions (Botha, 2013:1). Financial literacy is essential; however, it is imperative to first ascertain students' existing knowledge, their information processing methods, the promptness of information dissemination, and their decision-making strategies to construct a case for reform (Preston-Nelson, 2020). Consequently, an enhancement in the financial literacy of students enrolled in an open distance learning institution is required. South Africa requires undergraduate students to possess financial literacy and employ critical reasoning for making significant financial decisions. If accomplished, this would enhance their financial literacy as well as that of others (Kondlo, 2020:8).

These financially educated undergraduate students apply their knowledge to many financial products, including budgeting, retirement, and personal financial planning. This information will facilitate social development in urban and rural townships, particularly in managing the elevated debt levels of undergraduate students (Kondlo, 2020:8). The research employed a quantitative methodology utilising online questionnaires for data collection. This study aims to evaluate the financial knowledge of students enrolled in Higher Certificates in CEMS at the public Open Distance Education University, UNISA, in South Africa.

South Africa requires undergraduate students to possess financial literacy and employ critical reasoning for making significant financial decisions. Achieving this would enhance their financial literacy as well as that of others (Kondlo, 2020:8). Undergraduate students with financial literacy apply their knowledge to many financial products, including budgeting, retirement planning, and personal finance management. This information will facilitate social development in urban and rural townships, particularly in managing the elevated debt levels of undergraduate students (Kondlo, 2020:8). The research employed a quantitative methodology utilising online questionnaires for data collection.

What follows in this article is arranged this way: Section 2 presents an empirical analysis of the literature. Section 3 delineates the process. Section 4 presents the analysis of the results. Section 5 presents conclusions and recommendations.

2. Literature Review

Theoretical Framework

Social Exchange Theory

George Homans is the originator of social exchange theory (SET) (Zoller & Muldoon, 2019:48). Social exchange theory is a prominent conceptual framework in management and allied disciplines such as sociology and social

psychology (Cropanzano, Anthony, Daniels & Hall, 2017:479). Despite its designation, this is no singular philosophy but is more accurately perceived more of a collection of theoretical models (Cropanzano et al., 2017:479). Social exchange theory is a crucial theoretical framework for comprehending individuals' responses (Thomas & Gupta, 2021:5). These communications rely on the acts of another individual and may encompass exchange actions, tangible or intangible assets, as well as financial and social outcomes (Thomas & Gupta, 2021:5). Social exchange theory (SET) is a sociological and managerial framework that employs economic principles and behavioural psychology to elucidate behaviour (Zoller & Muldoon, 2019:50).

SET elucidates the behavioural dynamics between two or more individuals and how these interactions reinforce each other's behaviours, with both parties engaging in exchanges based on the expectation of mutual advantages (Zoller & Muldoon, 2019:50). One reason for the popularity of SET is its ease of testing and its applicability to diverse social circumstances (Zoller & Muldoon, 2019:50). SET consists of two fundamental components of exchange: content and method (Zoller & Muldoon, 2019:50). The exchange content examines the diverse resources shared among partners, while the second component of the process addresses the methodology by which partners might derive mutual benefits (Zoller & Muldoon, 2019:50). The degrees of financial literacy are contingent upon the extent of knowledge exchange among persons, their degree of contact, the kind of financial information, and the methods of its acquisition. In this perspective, the dissemination of financial knowledge is presumably more extensive among employed individuals than that acquired through financial education programs, peer learning, or on-the-job training (Nanziri, 2016:39).

Praxis Approach Model

The praxis model relies on the integration of theory and practice, representing a distinctive process that takes into account the individual experiences of the participants (Kondlo, 2020:42). The experiences of practice provide a foundation in financial education for researchers to investigate and cultivate a practice that is rigorous, ethical, and critical (Kondlo, 2020:42). Educational praxis is characterised as “the moral, ethical, and compassionate aspect of teaching,” which appears to be absent in conventional FLE methods (Blue, 2019:2).

Educational action constitutes a form of praxis in both an Aristotelian and post-Marxian context: it encompasses the ethically motivated and committed actions of individual educators and contributes to the formation of social structures and conditions for groups of individuals (Kemmis, 2010:9). Kemmis (2010:2) contended that, within the educational profession, research into praxis has two primary functions corresponding to the dual meanings of 'praxis': firstly, to inform the evolution of educational praxis, and secondly, to facilitate the advancement of education itself (Kemmis, 2010:9). Praxis is a particular form of action that is morally engaged, directed, and guided by established traditions within a discipline (Blue & Grootenboer, 2019:763). It is the type of action individuals engage in when contemplating the implications of their actions in the world (Blue & Grootenboer, 2019:763). Praxis refers to the actions individuals undertake after evaluating the circumstances and demands they encounter at a specific moment, then determining the most advantageous course of action (Blue & Grootenboer, 2019:763). The objective of training is frequently to acquire a skill, which contrasts with teaching; yet, praxis remains significant in both educational contexts (Blue, 2019:2).

Financial knowledge

Individuals require a certain level of financial knowledge to make educated financial decisions (Botha, 2013:2). The Organisation for Economic Co-operation and Development (OECD, 2009) defines financial knowledge as the

possession of fundamental understanding of essential financial concepts, encompassing basic numeracy, the implications of inflation, interest on loans and deposits, compound interest, risk diversification, and the risks associated with high-return investments. Financial knowledge is the most evident element of financial literacy, a consensus among most experts (Remund, 2010:279). Lusardi, Michaud, and Mitchell (2013:2) assert that financial literacy serves the economically disadvantaged and society as a whole. Knowledge is increasingly regarded as a vital commodity for humanity, a fundamental resource required for progress and even for basic survival (Kefela, 2011:3701). Successful financial management necessitates a foundational understanding of financial principles (Botha, 2013:17). Maintaining current awareness of financial news and events is a crucial aspect of financial literacy (Roberts, Struwig, Gordon, Viljoen, & Wentzel, 2018:2). This entails monitoring fluctuations in essential financial markets and indicators while becoming apprised of significant financial news (Roberts et al., 2018:2). The 2008 global financial crisis contributed to the heightened focus on financial literacy, underscoring the significance of financial understanding for consumers (Moolman, 2019:20). Financial literacy include fundamental concepts of currency, comprehension of the time value of money, purchasing power, and management of personal finances (Huston, 2010:303). Numerous authors emphasise the necessity for individuals to comprehend the time value of money and the inevitability of rising costs over time (Purdon 2018:13; Lusardi & Mitchell 2011:510).

Open Distance Learning in South Africa

Distance education, also known as correspondence education, has existed for over 150 years and was created to provide access to education for individuals barred from traditional educational systems (Makoe, 2022:9). By the conclusion of the 19th century, an increasing number of institutions began delivering distant education courses primarily aimed at educating the populace (Tait, 2008:86).

Unisa is the largest ODeL institution in Africa, boasting over 380,000 students, 68% of them are from the Southern African Development Community (Venturino & Hsu, 2022:402). The majority of these students reside in their home countries (e.g., South Africa, Zimbabwe, Namibia, Botswana, Swaziland, Zambia, Nigeria), pursue part-time studies at Unisa while employed full-time, and utilise the university's online platform, myunisa, for assignments (Venturino & Hsu, 2022:402). Students from rural regions can attend higher education, which would otherwise be unavailable to them without ODeL (Venturino & Hsu, 2022:402). Unisa was founded in 1873 as the University of the Cape of Good Hope and became the first public university globally to offer exclusively distant education in 1946 (Unisa, 2023).

Over the years, Unisa has been one of the few colleges in South Africa that offered educational access to all individuals, regardless of race, colour, or creed. Unisa's history is reflected in our extensive and notable alumni database, which includes individuals occupying prominent positions in global society (Unisa, 2023). Unisa may assert its position as the African university dedicated to serving mankind, owing to its profound connection to South Africa and the African continent. Unisa has acknowledged the necessity to swiftly adapt to the rapid evolution of 21st-century higher education, as seen by its management approach and leadership practices (Unisa, 2023). Unisa's primary objective is to leverage the developing capabilities of information and communication technology to propel the university into a genuinely digital future (Unisa, 2023).

3. Research Methodology

Research methodology should be regarded as a framework enabling researchers to gather, explore, and explain information to achieve the study's aims and objectives (Moaisi, 2013:56). This study adopted a quantitative research approach. This approach was developed from a positivist perspective, allowing researchers to objectively study a sample population and validate or challenge claims (Burrell & Gross, 2017). Quantitative research aims to reduce potential bias from the researcher and the data collection process to provide a clearer understanding of a phenomenon. This study employs a descriptive approach within a definitive design framework. definitive design aids the researcher in effectively examining the research problem, allowing for the selection of a possible course of action from various alternatives (Wiid & Diggins, 2013:57).

The study targets registered students from the 2021 to 2023 academic years enrolled in the Higher Certificate in CEMS at Unisa. A total of 15,905 students were registered for the higher certificate from 2021 to 2023. The researcher selected these years as they correspond to students currently registered, who will provide pertinent information for the study. This research employed non-probability sampling techniques, particularly convenience sampling. This research utilised the sample size determination table developed by Krejcie and Morgan (1970). The sample size corresponding to a population of 15,905 is 377. According to Comrey (1973), a sample size of 100 is considered poor, 200 is fair, 300 is good, 500 is very good, and 1,000 or more is excellent. This study will utilise a sample size of 500 to achieve a high level of confidence and accuracy. A total of 446 questionnaires were completed initially. In the data cleaning process, 409 responses were retained, while 37 questionnaires were deemed incomplete. The study achieved a response rate of 81.8%, which is strongly endorsed.

Data were collected through an online structured survey questionnaire administered to the participants. Subsequently, the targeted group is contacted to complete the questionnaire via email on the Myunisa site, as the form is web-based and can be disseminated to respondents through a link. Responses can be accessed and evaluated in the responses tab of the Microsoft Teams survey form. The researcher can view a summary of responses or opt to receive an email notification upon the submission of each response. A reminder message was subsequently dispatched to respondents to submit the completed questionnaire. A pilot study was conducted to pre-test the questionnaire prior to its distribution to respondents, thereby enhancing reliability.

Kaiser-Meyer-Olkin (KMO), Bartlett's test of sphericity, and Average Variance Extracted (AVE) were employed to assess validity. The minimum acceptable value of KMO for Exploratory Factor Analysis (EFA) is 0.50 or higher. Bartlett's test of sphericity is considered significant for exploratory factor analysis (EFA) when the significance value is $p < 0.05$. The Average Variance Extracted (AVE) was employed to assess convergent validity. Cronbach's alpha was employed to assess reliability. This study established a minimum factor loading of 0.30 for interpretation purposes. Data were analysed using descriptive statistics, with the computation of the mean and standard deviation. Descriptive statistical analysis enables the summarisation of data, with findings typically presented in tabular form.

4. Results

Validity and Reliability

The section presents findings of KMO-MSA, Bartlett’s test of sphericity, factor structure, and eigenvalues related to financial knowledge, along with the validity and reliability of the items. Table 1 presents the findings of the KMO-MSA and Bartlett’s test of sphericity.

Table 1: KMO-MSA and Bartlett's test for financial knowledge

KMO-MSA		0.971
Bartlett's test of sphericity	Approx. chi-square	6173.649
	Df	136.000
	Sig.	< .001

Table 1 indicates that KMO-MSA was 0.971, and p-value of Bartlett’s test of sphericity ($p = 0.001$) was less than 0.05, demonstrating statistical significance. The correlation structure of the construct was deemed acceptable for conducting an EFA. Table 2 presents the factor structure pertaining to financial knowledge.

Table 2 Factor structure of financial knowledge

Items	Financial knowledge
FK10	0,905
FK4	0,901
FK9	0,894
FK11	0,892
FK13	0,861
FK16	0,839
FK3	0,837
FK17	0,821
FK18	0,818
FK8	0,812
FK19	0,809
FK7	0,808
FK12	0,790
FK14	0,768
FK1	0,763
FK2	0,656
FK15	0,437

Table 2 shows that all seventeen items were extracted in the exploratory factor analysis and loaded onto Factor 1 (FK10, FK4, FK9, FK11, FK13, FK16, FK3, FK17, FK18, FK8, FK19, FK7, FK12, FK14, FK1, FK2, FK15). Items with loadings below .30 and those exhibiting cross-loadings were excluded. Kaiser’s criterion and cumulative

percentage of variance were employed to assess the retention of the factor. Table 3 presents the eigenvalue results and the cumulative percentage of variance associated with financial knowledge.

Table 3: Eigenvalue and cumulative percentage of variance of financial knowledge

Factor Characteristics							
		Unrotated solution			Rotated Solution		
	Eigenvalues	SumSq. Loadings	Proportion var.	Cumulative	SumSq. Loadings	Proportion var.	Cumulative
Financial knowledge	11.412	11.098	0.653	0.653	11.098	0.653	0.653

Financial knowledge exhibited a single eigenvalue exceeding 1, contributing to 65.3% of the cumulative variance, surpassing the suggested threshold of 50% to 60%. Consequently, a single factor was retained for further analysis, designated as financial knowledge. Table 4 presents the average variance extracted for financial knowledge.

Table 4: Average variance extracted: Financial knowledge

Factor	AVE
Financial knowledge	0,646

The AVE exceeds 0.5, as shown in Table 4, indicating that convergent validity is established. Convergent validity, a facet of construct validity, pertains to the effectiveness of a test in accurately assessing the theoretical construct it is designed to measure (Cheung, Cooper-Thomas, Lau & Wang, 2023). The items account for a greater proportion of the variance in the construct of financial knowledge. Table 5 presents the reliability of financial knowledge.

Table 5: Reliability: Financial knowledge

Factor	Coefficient α
Financial knowledge	0.964

The internal consistency of each scale was assessed through Cronbach’s alpha. The financial knowledge factor scales exhibited a Cronbach alpha of 0.964, exceeding the recommended threshold of 0.70. The instruments assessing financial knowledge demonstrate high consistency.

The Level of Financial Knowledge

The current study aims to evaluate the financial knowledge level of students enrolled in the higher certificate programme in CEMS. Descriptive statistics were employed to assess the level of financial knowledge. A five-point Likert scale was employed. The values for strongly disagree and disagree were aggregated, as were the values for strongly agree and agree. The percentages obtained for agreement were regarded as the measure of financial knowledge. To assess the level of financial knowledge, the following criteria were employed. Financial knowledge is categorised as follows: Low-level ($\leq 49\%$), Moderate-level (50%–64%), and High-level ($\geq 65\%$). Chen and Volpe (1998), Nomlala (2019), Ndou (2022).

Table 6: Scores for financial knowledge

Financial knowledge	Disagree	Don't know	Agree
FK1	9,4%	5,2%	85,5%
FK2	19,6%	4,7%	75,7%
FK3	10,5%	2,5%	87,0%
FK4	9,9%	3,4%	86,7%
FK7	14,0%	4,7%	81,3%
FK8	15,2%	6,9%	77,9%
FK9	11,5%	5,6%	82,9%
FK10	10,3%	4,7%	85,0%
FK11	11,5%	3,7%	84,8%
FK12	13,0%	8,8%	78,2%
FK13	13,5%	5,4%	81,1%
FK14	16,0%	6,4%	77,6%
FK15	30,5%	19,2%	50,2%
FK16	13,6%	11,9%	74,4%
FK17	12,3%	12,0%	75,7%
FK18	12,1%	11,6%	76,2%
FK19	13,3%	8,1%	78,6%
Total	13,9%	7,3%	78,8%

The results as per table 6 showed that most respondents agreed (78,8%) with the statements relating to financial knowledge. Therefore, based on the criteria adopted by Nomlala (2019) and Ndou (2022) categorising the level of financial literacy, the level of financial knowledge of students registered for a higher certificate in CEMS is high.

5. Discussions

The study investigated the financial knowledge level of students enrolled in the higher certificate programme in CEMS. The findings indicated a substantial level of financial knowledge at 78.8%. This indicates that students enrolled in the higher certificate program in CEMS possess strong financial knowledge and a solid understanding of financial concepts. Aydin and Selcuk (2019) found that students with higher financial knowledge scores exhibit more positive financial attitudes and engage in more desirable financial behaviours. Prempeh and Osei (2024) provide evidence that a significant number of students in Ghana's tertiary institutions possess a sound understanding of financial matters. This finding contradicts the argument presented by Ansong (2011), which stated that first-year business students at the University of Cape Coast generally lack financial knowledge. Ansong (2011) noted that a majority of tertiary students are acquainted with financial products such as fixed deposits, savings, mobile money, current accounts, student loans, and insurance plans. Chang and Hanna (1992) demonstrated that individuals possessing high financial knowledge tend to make more efficient decisions compared to those with lower levels of financial literacy.

6. Conclusion

This study aimed to evaluate the financial knowledge of students enrolled in a higher certificate program in CEMS at UNISA, an ODEL institution in South Africa. The findings indicated that 78.8% of students possessed a high level of financial knowledge. The findings of this study are inconsistent with earlier research indicating a lower level of financial knowledge among students globally. The composition of students in open distance learning institutions includes both younger and older individuals, as well as those who are employed and those who are not, distinguishing them from traditional institutions that primarily serve younger students. This study highlights the significance of financial knowledge among students; however, it is yet to be determined whether this elevated financial knowledge can be effectively applied to financial management practices and address the issue of high student debt levels. This study recommends that students in ODEL institutions be encouraged to apply their financial knowledge to enhance their financial management skills and make informed financial decisions, thereby improving their financial wellbeing both now and in their future adulthood. This study suggests that financial institutions and non-profit organisations in South Africa should initiate programs to educate students in ODEL institutions about effective financial management, enabling them to leverage their financial knowledge for personal benefit. The discourse regarding the financial literacy of students, particularly within ODEL institutions, remains unresolved; thus, further research is necessary to achieve a consensus on this matter.

Declaration of Conflicting Interests

The author declares no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

AI Declaration

Quilbot was used to assist with paraphrasing and language editing and improving clarity.

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