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Financial literacy status among non-government organisations' financial managers in Kwazulu- Natal-South Africa

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ABSTRACT

This study investigated the financial literacy status among financial non-government organisations (NGOs) managers in KwaZulu-Natal. The study adopted a quantitative research strategy; a Likert scale questionnaire was used to collect data from 53 managers purposively and conveniently sampled in KwaZulu-Natal. Robustness analysis was performed using SPSS version 28 for descriptive and inferential statistics. The findings of the study revealed that all independent variables correlate between 1.000 and -.364. This study provided practical and theoretical contributions in the field by deepening an understanding of the key variables identified by this research study, which has been justified by the most relevant literature that drives the financial literacy of NGOs and financial managers. The study further offered insight into constructs for measures of financial literacy in NGOs. This study added to the body of knowledge on the financial literacy of NGOs financial managers in South Africa. The study urgently recommends that NGOs, academia, policymakers, and other key players in the financial literacy field consider the urgent need for financial literacy training or short courses within this sector. These findings urgently call for the attention of the policymakers. This study offered a future research plan on the subject matter in the areas of the true extent of the practicality of financial literacy among financial non-government organisations' managers that were not addressed in this article.

Contribution/ Originality: This study added to the body of knowledge on the financial literacy of NGOs financial managers in KwaZulu Natal, South Africa, and elevated their level of financial literacy. Areas that require NGOs financial managers' urgent attention were identified, and the recommended remedial action may curtail future NGOs failure.

1. RESEARCH BACKGROUND ANF GAP

Chaulagain and Devkota (2018) note that financial literacy is rapidly being recognised as a core skill, essential for entities operating in an increasingly complex financial landscape. In their review of conceptual definitions of financial education, Engels, Kumar, and Philip (2020) alluded that "definitions of financial literacy fell into five categories: (1) knowledge of financial concepts; (2) ability to communicate about financial concepts; (3) aptitude in managing personal finances; (4) skill in making appropriate financial decisions; and (5) confidence in planning effectively for future financial needs". Wagner (2020) further highlighted the following key pivotal and vibrant roles of financial literacy for non-government organisations (NGOs): (a) being accountable to the donors; (b) securing future funds; (c) eliminating fraud and theft; (d) making productive financial decisions; (e) achieving objectives for the long-term period; (f) enhancing credibility; and (g) strengthening fundraising efforts. In their study on measuring and profiling the Southern African population's financial literacy. The impact of financial literacy among South Africans was investigated by Nanziri and Leibbrandt (2018) who found out that South Africans had an average financial literacy score of 48.4%. Their study's results, more specifically KwaZulu-Natal, exhibited a score of 48.9%.

Prior researchers and scholars in the field of financial literacy, such as Mabhanda (2015); Nicolini (2019) and Soldat (2021) have emphasised the critical role of financial education in enhancing financial sustainability, and from these, four important problems can be identified. These are the issues: First, the majority of financial managers within the NGOs sector suffer from insufficient financial knowledge relating to financial literacy (financially illiterate). Secondly, the lack of empirical evidence on key drivers of financial illiteracy among financial managers within the NGOs sector is the robust trigger for the rise of NGOs collapsing. Thirdly, there are no empirical models on key measurements of financial literacy in the NGOs sector. Wentzel (2016) and Van Nguyen, Ha, Nguyen, Doan, and Phan (2022) note that these three issues are the root cause of confusion in the way financial literacy in NGOs and financial managers is understood and interpreted globally and in the South African context.

A robust debate among scholars on the financial literacy status of NGOs financial managers in South Africa and elsewhere is currently occurring (Wilson, Panos, & Adcock, 2021). The financial literacy of financial managers in so many entities is a cause for concern since the industry drives local initiatives to address challenges that are beyond the reach of the public and private sectors (Klapper & Lusardi, 2020). However, the critical role of financial literacy for financial managers is not widely emphasised by NGOs governance for economic performance in South Africa (Nanziri & Leibbrandt, 2018). Ngek (2016) argues that "even though financial literacy is one of the key drivers influencing a financial manager's ability to manage finances effectively and efficiently in South Africa". Ardila, Febriaty, and Astuti (2021) noted that a factor influencing the failure of NGOs in KwaZulu Natal is poor financial literacy of financial managers. Empirical evidence shows that some NGOs have collapsed due to their financially illiterate managers (Arya, 2018). According to Soldat (2021) Many SMEs, including NGOs in KwaZulu-Natal, struggled to attain financial sustainability, and the failure to achieve financial sustainability resulted in a craze in deregistration from the Department of Social Development (DSD). The rate of collapse of NGOs over time has led some scholars to argue that donors should not even attempt to engage in NGOs activities at all, but rather to do so and subsequently operate unsustainably (Klapper & Lusardi, 2020). According to Sitharam and Hoque (2016) the collapse of these entities is a burning issue since their sustainability in KwaZulu-Natal has been considered by Zihindula, Andrew John, Gumede, and Richard Gavin (2019) to be essential to local, national, and international activities because NGOs play a critical role in society, promoting community self-reliance, democracy, and local initiatives to address challenges that are beyond the reach of the public and private sectors.

Though some empirical evidence argues that donations are a means to attain financial sustainability, do donations and grants really have an effect on financial sustainability? Financial education and financial literacy enable financial managers to manage available financial resources efficiently and effectively in a way that will increase the ability of the NGO to provide more services to the beneficiaries. The drive towards the attainment of NGOs financial sustainability also brings into question financial literacy among financial managers (Mbukanma & Rena, 2022).

Poor or careless financial management and financial illiteracy have been sighted as major causes of business failure among not-for-profit-oriented organisations such as NGOs (Mbukanma & Rena, 2022; Nanziri & Olckers, 2019). Also, recent studies have argued that financial mismanagement due to a lack of financial literacy is a key challenge non-government organisations face, which largely affects their success negatively. Other studies, such as Annamaria Lusardi (2019) highlighted poor financial management among financial managers as one of the factors contributing to the massive failure of non-profit organisations such as NGOs. Bahl, Amitabh, and Singh (2020) suggest empirical evidence related to financial literacy among NGOs' financial managers, especially cognitive understanding of financial knowledge, skills, and responsibility, is still needed and highly relevant. Elevating their financial literacy levels could affect their financial responsibility and financial behaviour, is expected to benefit their NGOs in making informed judgments and effective decisions regarding the use and management of money and elevate financial literacy that benefits their NGOs for long-term sustainability.

A question dominating the research space is: What is the financial literacy status of NGO financial managers in KwaZulu-Natal? In our view, the response to this question will fill a research gap in the literature and enable similar research. In light of the aforementioned empirical studies, this study is also an inquiry into the financial literacy status among financial managers in South African NGOs. This study is motivated by the need to determine the financial literacy of financial managers' cognitive ability to understand and use financial information within South African NGOs, KwaZulu Natal, as the case study. This study was also motivated by the fact that this is an unexplored area and that the financial literacy of NGOs financial managers has not been researched as a tool to enhance NGOs'_financial viability and sustainability. Thus, a study will be conducted to elevate the financial literacy among NGOs' financial managers, particularly cognisance of financial knowledge, skills, and responsibility. The article, therefore, investigated the financial literacy status among NGOs financial managers in KwaZulu-Natal.

The article is structured as follows: the subsequent part provides a literature review and theories. The part that follows provides an explanation of the research technique used. Subsequently, the fourth section includes the empirical analysis of the study, along with a discussion of the results and their implications. The concluding part provides the study's conclusions and recommendations derived from the research findings. It also adds to the field of science by addressing its shortcomings and suggesting areas for further research.

2. LITERATURE REVIEW AND THEORIES BEHIND THE STUDY

Financial literacy should not be taken for granted (Annamaria Lusardi, 2019). Hsiao and Tsai (2018) found that the higher the financial literacy, the higher the benefit for people because it helps them to make better financial decisions and gives them more control over their money. Consequently, it improves their economic and financial performance and also minimises the chances of being misled on financial matters (Ardila et al., 2021). Furthermore, Hsiao and Tsai (2018) note that financial literacy contributes to broader economic growth and development. However, Hastings and Mitchell (2020) argue that financial managers within the NGOs sector generally do not have a sufficient level of financial literacy in order to enable them to make informed financial decisions, concluding that behaviour biases have a distorting influence on financial managers' decision-making. Poor financial decision analysis has been identified by Amagtome and Alnajjar (2020) as the leading cause of the failure of NGOs. While Valaskova, Bartosova, and Kubala (2019) emphasised that financial literacy, knowledge, and skills in financial decision analysis are robust triggers that significantly impact the financial sustainability and growth of NGOs.

A positive relationship between financial literacy and low-cost borrowers was found in a research study conducted by Lusardi and De Bassa Scheresberg (2013) and Martin, Sam, and Gibson (2021) in the United States of America. Martin et al. (2021) findings further revealed that most high-cost borrowers display very low levels of financial literacy and lack of basic financial concepts, which affect their financial performance level in their affairs.

The effect of financial literacy on financial knowledge and investment decision analysis among United Arab Emirates (UAE) investors has been investigated by Suri and Purohit (2017) and Abdalla and Srivastava (2017) found that the field of individual activities affects financial literacy level, and people that invest in financial awareness have a higher level of financial literacy. However, the evidence has not extended to the case of public sector organisations such as NGOs. Although financial literacy has been extensively and widely discussed among many academics and practitioners, little is known about the status of financial literacy of NGOs' financial managers in KwaZulu-Natal, South Africa, and how financial literacy can be among NGOs' financial managers. Hence, research is urgently needed in order to fill in the gap in the literature by investigating the financial literacy status of NGOs' financial managers in KwaZulu-Natal, South Africa. In respect to the above, we address such a gap and extend the debate by providing empirical evidence on the financial literacy status of NGOs' financial managers in the South African context.

2.1. Constructs for Measures of Financial Literacy

According to Brophy et al. (2018) the National Income Dynamics Study (NIDS) measures financial literacy using three and five multiple questions that test numeracy, understanding of inflation, understanding of compound interest, and understanding of risk diversification. This definition is in line with the work of financial scholars (for review, see (Atkinson & Messy, 2012; Huston, 2010)) measuring financial literacy requires a multidimensional score that would incorporate financial awareness, knowledge, skills, attitude, and behaviour. Dundure and Sloka (2021) concur with Brophy et al. (2018) adding that the sophisticated, multifaceted methodological approach adopted by the South African Social Attitude Survey (SASAS) subdivided financial literacy into four domains. These domains are: (a) financial control; (b) choosing and using appropriate financial products; (c) financial planning; and (d) knowledge and understanding.

According to Bielova, Oliinyk, Nilova, and Nilova (2018) the Organisation for Economic Co-operation and Development (OECD) and International Network on Financial Education (INFE) provide a brief synopsis of what is known about financial literacy and subdivide them into seven themes: (i) financial knowledge and understanding, (ii) financial decision making, (iii) prudent financial behaviour and attitudes, (iv) saving behaviour, (v) experiencing and coping with financial shortfalls, (vi) money management, and (vii) credit and loan behaviour.

Despite several studies on financial measures, Oliver-Márquez, Guarnido-Rueda, and Amate-Fortes (2021) state that measurement of financial literacy levels is, therefore, widely recognised as a priority for countries or entities seeking to deliver financial education differently and evaluate its impact at an institutional level. Oliver-Márquez et al. (2021) further state that such measurement exercises allow policymakers to identify potential needs and gaps in relation to specific aspects of financial literacy.

2.2. Reasoned Action Theory

Ajzen and Kruglanski (2019) theorised that human behaviour in everyday life is mainly done under volitional control. Ajzen and Kruglanski (2019) further state that it is in processes that can be applied consciously, repetitively, or habitually. Brophy et al. (2018) note that "an individual's intention is a function of personal factors and social influence". Hamilton, Phipps, Schmidt, Bamberg, and Ajzen (2022) alluded to an individual positive/ negative performing the behaviour, which is termed attitude towards the behaviour and a person's perception of the social pressures put on him to perform or not to perform the behaviour in question, which is termed subjective norm performed when they evaluate it positively and when they believe that important others think they should perform it. First, the theory assumes that humans usually behave sensibly and that the importance of these attitudinal considerations and subjective norms/ normative considerations depends on the intention under investigation. Hamilton et al. (2022) alluded to the fact that on other intentions, normative considerations predominate and on other attitudinal considerations they predominate.

2.3. The Behavioural Finance Theory

According to Yang (2016) behavioural finance is an area of finance that offers the use of psychology-based theories to explain anomalies and deviations from expected rationalities of human behaviours in financial decisions. Filbeck et al. (2017) supported these views and added that the behavioural finance theory inculcates the behavioural science theories of psychology into the field of finance, with a view to re-examining Individual investment behaviours in financial markets. Filbeck et al. (2017) provided empirical support and concluded that these investment behaviours are individual financial decisions that are often replicated in stock market trends, such as severe peaks and troughs in stock prices. While originating contributions to the behavioural finance theory have been evidenced in the works of scholars such as Charles (1841); Keynes (1936) and even Simon (1955) however, the revolutionary work on the behavioural finance theory is widely accredited to Kahneman (1979) through his work on the Prospect theory. In ab initio, Dacey and Zielonka (2008) in their works on the prospect theory, provided an alternative theoretical perspective in relation to decision-making in high-risk environments by presenting several deviations and abnormalities in human behaviour that violate the axiomatic assumptions of the expected utility hypothesis. These works explicate the origins of behavioural finance theory.

The expected utility hypothesis, also referred to as the neoclassical theory, was initially highlighted as a regulatory model that represents the behaviour of an ideally rational person and not as a descriptive model that explains the behaviour of real people (Costa, Carvalho, & Moreira, 2019; Tversky & Kahneman, 1974). In contrast to the expected utility hypothesis, the prospect theory evidences that subjective factors influence the individual decision-making process, thereby causing individuals to deviate from behaving rationally through human Behavioural abnormalities often termed cognitive biases (Costa et al., 2019; Kahneman, 1979). Statman (2019) asserts that the field of Behavioural finance, like every other field of knowledge, remains an evolving field and a work in progress. He further noted that the first generation of Behavioural finance commenced in the 1980s, with postulations that sought to address gaps and cracks in the classical and traditional finance theories that described individuals as rational beings seeking maximum expected utility in their financial decisions (Statman, 2019). However, real-world evidence has proven traditional finance theorists to be wrong in their assumption of human rationality, especially in investment decisions, as market evidence depicts human errors often driven by poor cognitive and emotional tendencies (Costa et al., 2019).

Statman (2019) highlights that traditional finance, otherwise known as standard finance, is based on the following axiomatic assumptions: (1) The traditional finance theory assumes that individuals are rational; (2) The traditional finance theory assumes that individual investors develop their portfolios based on the mean-variance portfolio theory assumptions, which hold that individual wants comprise only high expected returns and low risk. (3) The traditional finance theory assumes that individual spending and saving behaviours are based on the standard life cycle theory, which assumes that individuals find it easy to follow the right path to save and spend. (4) under the traditional finance theory, the asset pricing theory accounts for the expected returns of investment, whereby deviations from the expected returns on investments are ascribed to risk differentials, and (4) the traditional finance theory believes in market efficiency, which assumes that asset prices are equal to asset values; hence, it is difficult to "beat the market" by making abnormal profits.

Unlike the traditional finance theory, Statman (2019) grouped the behavioural finance theory into five components, which include: (1) the behavioural finance theory assumes that individuals are ordinary people; (2) it assumes that individuals build their portfolio as described by the behavioural portfolio theory, where individual portfolio wants exceed beyond their high expected returns and low risk, such as for social status and social responsibility; (3) It further assumes that individuals save and spend as described by the behavioural life-cycle theory, whereby limitations such as poor self-control make it difficult to save and spend in the right manner. (4) Under the behavioural finance theory, the behavioural asset pricing theory is used to account for the expected returns of investments, whereby deviations in expected returns are ascribed beyond just mere risk differentials such as levels of social status and social responsibility, and (5) the theory assumes that markets are inefficient from the perspective that asset prices are always equal to asset values". However, assuming market efficiency relates to the perspective that markets are difficult to beat (Statman, 2019).

Yang (2016) asserts that the significance of the behavioural finance theory does not only lie in the correction of the gaps in the traditional finance theory but further improves clarity on the underlying theories that inform finance and financial decisions. From a micro-level perspective, the analysis of investor's psychology through the lens of behavioural finance theory not only protects immune individuals from making decision errors but also gives individuals the opportunity to formulate bespoke investment strategies. Similarly, from a macro-level perspective, behavioural finance theory analyses the effectiveness and efficiency of the stock market by considering whether asset prices reflect asset values (Sivaramakrishnan, Srivastava, & Rastogi, 2017).

2.4. Planned Behaviour Theory

According to Ogiemwonyi (2022) this theory was an extension of the theory of reasoned action, where non-volitional factors are also included as determinants of individual behaviour. Tornikoski and Maalaoui (2019) postulated that an individual's attempt to perform behaviour interacts with the degree of his control to determine the likelihood of the actual performance of the behaviour. Thus, an individual expects to perform behaviour if he intends to try it and if he has a high subjective probability that he can control it. Therefore, behavioural expectations are a function of intention and control. Sivaramakrishnan et al. (2017) argue that with the theory of planned behaviour, behavioural expectations are more likely to predict actual behaviour more accurately than behavioural intentions. This study will apply the theory of planned behaviour in measuring the level of NGOs financial managers' financial literacy. Planned behaviour theory is shown in Figure 1.

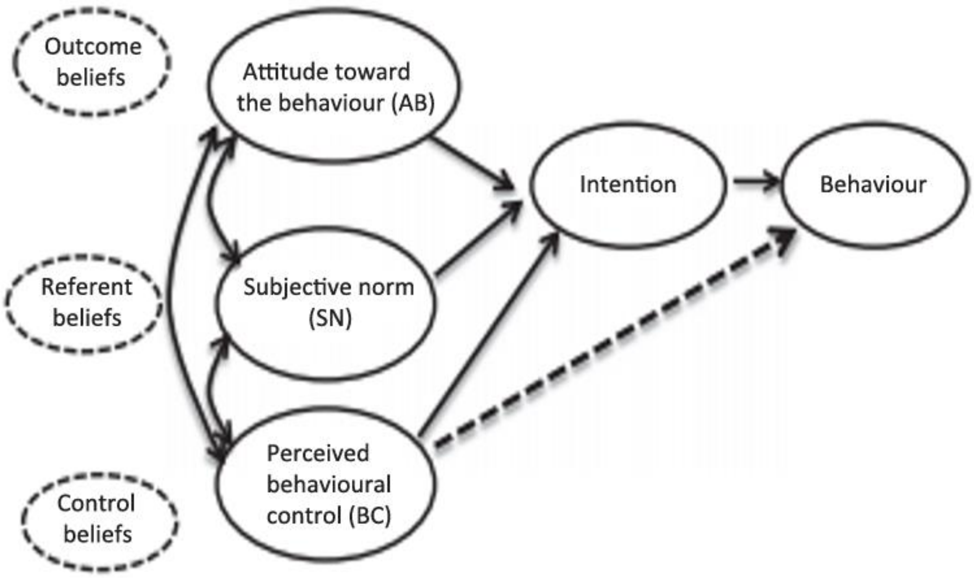

Figure 1. Theory of planned behavior.

Source: Sivaramakrishnan et al. (2017).

2.5. Bounded Rationality

The pioneering works of Herbert Simon on the bounded rationality theory highlighted a detailed and critical assessment of several influences that hinder rational choices among individuals (Simon, 1955). Simon (1955) asserts that individuals have bounded rationality, and when they encounter information that is either incomplete or intractable, they tend to find adequate solutions rather than optimal ones. This perspective was the central notion of the conceptualisation of the "satisficing" approach to understanding human decisions. The satisficing approach offered a more realistic understanding of the human decision process as compared to a rationalistic model such as Bernoulli's expected utility theory (Bernoulli, 2011; Levy & Levy, 2016). The theorists of traditional economic philosophy, who are often referred to as neo-classicalists, believe that human decision-making is often based on standardised neoclassical assumptions and is driven by the market forces of an ideal society (Navarro-Martinez, Loomes, Isoni, Butler, & Alaoui, 2018). However, the flaws and apparent deviations of human decision-making processes from rationality have been one of the foundational blocks of behavioural economics (Thaler, 2016).

Altman (2015) and Thaler (2016) provide evidence that the bounded rationality theory studies Behavioural irrationalities in human decision-making due to limitations in human cognition". Hernandez and Ortega (2019) assert that rationality is an ambiguous phenomenon in the real world, as several research studies have opined that a lack of knowledge bounds human rationality. Hernandez and Ortega (2019) further reiterated that the struggle for rationality among individuals is limited to the confines of knowledge possessed by individuals. Hernandez and Ortega (2019) note that while a decision can either be objectively rational or subjectively rational, an objectively rational decision is based on the correct behaviour that maximises the values given in a particular context. Hernandez and Ortega (2019) further argue that on the other hand, a subjectively rational decision is such that it maximises achievement relative to the individual's knowledge.

The theory of bounded rationality views a decision process from a different perspective. For instance, in a decision-making process for a relatively simple problem, it is difficult to obtain the maximum value, as it is impossible to verify all possible alternatives (Navarro-Martinez et al., 2018). Environmental factors influence and differentiate people based on available opportunities and desires (Gigerenzer, 2020). Hence, according to Gigerenzer (2020) individual decisions are influenced by both their desires and the opportunities they possess. While this perspective may not be entirely accurate, there is a possibility that an individual posed with a decision may not be aware of some opportunities that are actually viable to him, or he may believe that certain opportunities are favorable to him, which in reality are not; thus, his choice may not be guaranteed as the best alternative (Gigerenzer, 2020). This study will apply the bounded rationality theory to NGOs financial managers' analytical calculations to attain outcomes that are within the bounds of their financial objectives. The conceptual model developed by Hung, Parker, and Yoong (2009) is illustrated in Figure 2.

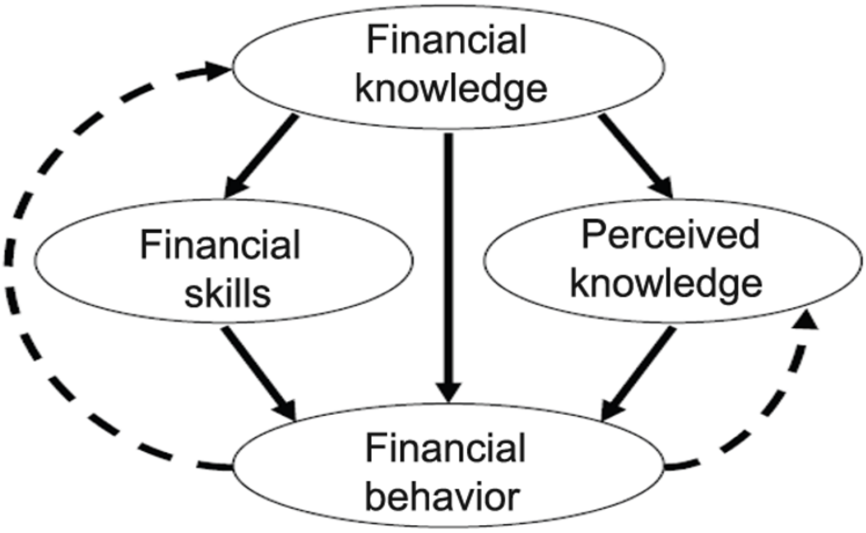

Figure 2. Logical relationships among financial literacy components.

Source: Hung et al. (2009).

3. RESEARCH METHODOLOGY

This research study adopted a quantitative descriptive survey strategy of collecting and analysing primary data with the aim of discovering and testing the relationship or interaction among study variables. The size of the population was unknown. The targeted population of this study was Financial Officers, Bookkeepers, Project Managers, Chief Finance officers and Accountants in KwaZulu Natal, who were selected using purposive, judgmental, and convenience sampling techniques. Purposive and convenience sampling techniques are highly relevant since a complete list of all NGOs in KZN was unavailable. However, the findings of this research study cannot be generalized to represent the entire population. Respondents were chosen as they had better knowledge of the subject matter. The study used a well-structured Likert-scale questionnaire. Ethically, the questionnaire (a cross-sectional survey) was administered to 53 anonymous NGOs and financial managers who attended the conference scheduled by an anonymous organization in Pietermaritzburg. Likert scale questions were scored as follows: 1=Very Poor, 2=Poor, 3= Satisfactory, 4= Good and 5= Very Good. All were correctly filled out and returned, showing a response rate of 100%. Data generated were analyzed using descriptive and inferential statistics; a one-way ANOVA at a 1% significance level was performed on the financial literacy scores across the domain. The Cronbach's Alpha for the scales used for this study was .900, which suggests a high level of internal consistency. The next section presents the study's results.

Table 1. Demographic data.

Response type	Questionnaire items	%
Gender	Female	29 (54.7%)
	Male	24(45.3%)
Total		53(100%)
Age	Below 21	1(1.9%)
	21-25	1(1.9%)
	26-35	3 (5.7%)
	36-48	18(34.0%)
	49-55	12(22.6%)
	56-65	14(26.4%)
	Above 60	4(7.5%)
Total		53(100%)
Level of education	Matric	1(1.9%)
	Certificate	6(11.3%)
	Diploma	14(26.4%)
	Degree	21(39.6%)
	Honours	7(13.2%)
	Masters	3(5.6%)
	Doctorate	1(1.9%)
Total		53(100%)
Position	Financial officer	8(15.1%)
	Bookkeeper	10(18.9%)
	Project manager	22(41.5%)
	Chief finance officer	7(13.2%)
	Accountant	6(11.3%)
Total		53(100%)
Work experience	Less than 1 year	1(1.9%)
	Less than 3 years	5(9.4%)
	Less than 5 years	1(1.9%)
	Less than 10 years	14(26.4%)
	Over 10 years	32(60.4%)
Total		53(100%)

4. EMPIRICAL ANALYSIS AND DISCUSSION OF THE RESULTS

4.1. Demographic Data

Table 1 shows that 29 (54.7%) of the respondents are women and 24 (45.3%) are men. Thus, there were more females than males. This finding supports those of Mashizha, Maumbe, and Sibanda (2019) "who reported that there was no significant difference in financial literacy across the gender divide with men scoring a mean of 72% and women scoring 67%. Gerth et al. (2021) also found that "gender was insignificant in financial literacy determination.

Table 1 also illustrates that 1 (1.9%) of the respondents were below 21 years old, 1 (1.9%) were between the ages 21 and 25, 3 (5.7%) fell into the age group 26 to 35, 18 (34.0%) of the respondents were between the ages of 36 and 48, 12 (22.6%) of the respondents were between the ages of 49 and 55, 14 (26.4%) of the respondents fell into the age group 56 to 65, and 4 (7.5%) of the respondents were above 60 years old. It can be inferred that "the majority of the respondents were between 36 and 48 years old." These results conflict with the results of many studies around the world that have found women to have significantly lower financial knowledge and ability than men (Mashizha et al., 2019; Nanziri & Leibbrandt, 2018; Shusha, 2017; Widityani, Faturohman, Rahadi, & Yulianti, 2020).

Table 1 further illustrates that 8 (15.1%) of the respondents held a matric, 6 (11.3%) held a certificate, 14 (26.4%) held a diploma, 21 (39.6%) of the respondents held a degree, 7 (13.2%) held honors, 3 (5.6%) held a masters, and 1 (1.9%) of the respondents held a doctorate. This result supports prior literature that confirms that good financial literacy is strongly associated with the level of education (Sabri et al., 2021).

Table reveals that 8 (15.1%) of the respondents were financial officers, 10 (18.9%) were bookkeepers, 22 (41.5%) of the respondents were project managers, 7 (13.2%) were chief finance officers, and 6(11.3%) were accountants. It was also crucial to gauge whether respondents had relevant working experience and financial literacy. Table 1 above illustrates the distribution. Shusha (2017) found that the high level of financial literacy among entity managers may be explained by gender, age, level of education, and the average years of experience within an entity. Gerth et al. (2021) also concluded that there is an association between these factors and financial literacy. These findings contrast with those of Widityani et al. (2020) who concluded that gender, position, education, and years in the business or company do not serve as suitable predictors of an individual's financial literacy.

4.2. Descriptive Analysis and Respondents' Rating of the Level of Financial Literacy of NGOs' Financial Managers in KwaZulu Natal

Table 2 presents the data analysis and results produced based on research questions that participants answered during a survey. According to Weir et al. (2018) standard deviation is a measure of quantifying variation in the dataset". Weir et al. (2018) further state that "a high standard deviation indicates that the data points are spread out over a wide range of values, and a low standard deviation indicates that the data points tend to be close to the mean of the set.

Table 2 further presents poor financial literacy levels among respondents, which is interpreted as poor financial literacy. No statistical significance between dependent and independent variables was found. From the results in Table 2, the chi-square and *P-value* found indicated that NGOs financial managers are not financially literate. The study's results are in line with the current body of knowledge that states that financial literacy, knowledge, and skills in financial decision analysis are robust triggers that impact positively on the financial sustainability and exponential growth of NGOs (Valaskova et al., 2019).

The study's results support the findings of other studies that concluded that poor financial management among financial managers is one of the factors contributing to the massive failure of non-profit organizations such as NGOs (Klapper & Lusardi, 2020). Annamaria Lusardi (2019) highlighted that poor financial management and a lack of financial literacy among financial managers as one of the factors contributing to the massive failure of non-profit organisations such as NGOs. These findings contrast with those of Ngek (2016) who concluded that Small business Owners had a high level of financial literacy.

Bahl et al. (2020) note that increasing NGOs financial literacy and knowledge of financial literacy could affect their financial responsibility and financial behaviour, is expected to benefit their NGOs in making informed judgments and effective decisions regarding the use and management of money, elevate financial literacy and benefit not only their NGOs but also at a macro level it affects. However, the results of Derbyshire and Fouché (2018) significantly differ from those of Hastings and Mitchell (2020) who found that financial managers within NGOs generally do not have a sufficient level of financial literacy in order to enable them to make informed financial decisions, concluding that behaviour biases have a distorting influence on financial managers' decision making. Annamaria Lusardi (2019) and Amagtome and Alnajjar (2020) described poor financial decision analysis as the primary root cause of the failure of NGOs.

Table 2. Descriptive statistics and respondent's rating.

Item N°	Questionnaire items	Responses					N	Descriptive statistics		Chi-square value	P-value
		Very good	Good	Satisfactory	Poor	Very poor		Mean	Std. dev.		
1	How do you rate your accounting and bookkeeping skills?	11 20.8%	7 13.2%	17 32.1%	8 15.1%	10 18.9%	53 100%	3.02	1.380	6.065	0.350
2	How do you rate your Numeracy skills?	17 32.1%	7 13.2%	10 18.9%	19 35.8%	0 0%	53 100%	3.42	1.278	21.402	0.372
3	How do you rate your ability to make informed financial decisions?	17 32.1%	47 .5%	8 15.1%	15 28.3%	9 17.0%	53 100%	3.09	1.535	8.538	<0.001
4	How do you rate your financial attitudes?	8 15.1%	11 20.8%	27 50.8%	3 5.7%	4 7.5%	53 100%	3.30	1.049	18.851	0.684
5	How do you rate your financial behaviour?	5 9.4%	15 28.3%	10 18.9%	22 41.5%	1 1.9%	53 100%	3.02	1.083	12.679	0.034
6	How do you rate your financial knowledge?	9 17.0%	7 13.2%	10 18.9%	5 9.4%	22 41.5%	53 100%	2.55	1.551	7.305	0.959
7	How do you rate your financial responsibility?	14 26.4%	20 37.7%	7 13.2%	8 15.1%	4 7.5%	53 100%	3.60	1.246	13.317	<0.001
8	How do you rate your financial skills?	7 13.2%	18 34.0%	10 18.9%	15 28.3%	3 5.7%	53 100%	3.21	1.166	14,210	<0.001
9	How do you use cashbook?	5 9.4%	12 22.6%	13 24.5%	11 20.8%	12 22.6%	53 100%	2.75	1.299	19.565	0.077
10	How do you use expenses book?	11 20.8%	7 13.2%	3 5.7%	16 30.2%	16 30.2%	53 100%	2.64	1.545	6.498	<0.001
11	How do you conduct financial audits?	7 13.2%	8 15.1%	6 11.3%	11 20.8%	21 39.6%	53 100%	2.42	1.473	15.917	0.033
12	How do you conduct financial controls?	8 15.1%	10 18.9%	4 7.5%	17 32.1%	14 26.4%	53 100%	2.64	1.442	32.905	0.073
13	How do you use a fixed asset register?	5 9.4%	8 15.1%	10 18.9%	14 26.4%	16 30.2%	53 100%	2.47	1.324	23.307	<0.001

4.3. Analysis of Variance (ANOVA)

The analysis of variance is used to test whether the financial literacy practices model is fit for prediction. The results indicate the P-value was less than 1%, indicating statistical insignificance. This result indicates that the null hypothesis that the model is not fit for prediction is rejected. Table 3 presents the analysis of variance.

Table 3. Analysis of variance (ANOVA).

Model	Sum of squares	df	Mean square	F	Sig.
Regression	56.984	13	4.383	6.454	$<0.001^{b}$
Residual	26.488	39	0.679		
Total	83.472	53			

Note: b. Predictors: (Constant), Independent variables.

From the analysis of variance (Table 3), the study established that the regression model had an insignificant level of <.001, which is an indication that the data was ideal for drawing a valid conclusion on the population parameters. The finding confirms the objective of this study, which investigated the financial literacy status of NGOs financial managers in KwaZulu-Natal.

4.4. Correlations Analysis

Table 4 shows the coefficients, correlations, and relationships between all financial literacy variable estimated using a Pearson correlation. The correlation matrix shows the results between each of the variables included in the model. Empirical evidence produced under Table 4 shows that all independent variables of the study correlate between 1.000 and -0.364. Table 4 showed a negative correlation coefficient (-.364) between the use of asset registers and NGOs financial literacy practices. The negative coefficient between financial literacy and financial literacy practices is an indication of a lack of association between financial literacy and NGOs financial managers in KZN. This supports the current body of knowledge that finds that many financial managers do not have the financial knowledge needed for sound financial decision-making to grow their organizations (Engels et al., 2020).

Table 4 further revealed positive and insignificant correlation coefficients for numeracy skills, with a value of .573. It was followed by financial knowledge with the following value: .014, as depicted by the table, financial audits have a value of.148, financial behaviour is .469, and financial controls is 1.00. These correlations, therefore, are highly statistically significant, indicating that NGOs financial managers in KZN are highly financially literate in numeracy skills, financial knowledge, financial audits, financial behaviour, and financial controls. The results of the current study are overwhelmingly supported in the literature (Kefela, 2011; Klapper & Lusardi, 2020; Paşa, Picatoste, & Gherghina, 2022). Positive correlations have also been found between financial behaviour and financial practices by Bahl et al. (2020).

Table 4. Correlations matric between dependent and independent variables.

Variables	Ass.Reg	NumSk	FinAtt	ExpBook	Acc &Book	FinSki	Cashbook	FinKnow	FinAudits	FinResp	Fin.Dec	FinBeh	FinControls
Asser register	1.000												
NumSkills	0.057	1.000											
FinAtt	0.489	0.123	1.000										
ExpBook	-0.251	-0.265	0.275	1.000									
Acc&Book	0.279	-0.267	0.418	-0.097	1.000								
FinSki	-0.462	-0.301	-0.367	0.275	-0.025	1.000							
Cashbook	-0.103	-0.560	-0.082	0.128	0.386	0.205	1.000						
FinKnow	0.270	-0.028	0.072	-0.046	0.005	0.016	-0.345	1.000					
FinAudits	-0.140	0.213	-0.290	-0.215	-0.537	-0.221	-0.038	-0.224	1.000				
FinResp	0.244	-0.554	0.197	0.059	0.230	-0.441	0.413	-0.072	-0.125	1.000			
Fin.Dec	-0.383	-0.615	-0.192	0.616	-0.130	0.414	0.485	-0.234	-0.001	0.237	1.000		
FinBeh	-0.232	0.312	-0.597	-0.668	-0.246	-0.049	-0.329	-0.133	0.226	-0.296	-0.498	1.000	
FinControls	-0.364	0.573	-0.285	-0.060	-0.601	-0.036	-0.761	0.014	0.148	-0.503	-0.282	0.469	1.000

Furthermore, Table 4 further revealed a negative correlation coefficient for the use of asset registers, financial attitudes, the use of expenses books, accounting and bookkeeping, financial Skills, and utilization of cashbooks, financial responsibility, and financial decision with (-.364), -.285, -.060, -.601, -.036, -.761, -.503, and -.282, respectively. These negative coefficients among these variables clearly indicate that NGOs financial managers are poorly and less financially literate. Fan and Chatterjee (2018) found a poor level of financial literacy among NGOs financial managers in Malaysia. These results support the findings of Annamaria Lusardi, Hasler, and Yakoboski (2021) who found that financial managers were not financially literate nor knowledgeable in financial matters, and this would tend to impact negatively on the entity's future through incompetent financial literacy. These results of poor or careless financial management and financial literacy have been sighted as major causes of business failure among not-for-profit-oriented organisations such as NGOs (Mbukanma & Rena, 2022; Nanziri & Olckers, 2019). In contrast, Derbyshire and Fouché (2018) found that the overwhelming majority of their South African-based respondents did undertake financial planning through budgeting. Several similar studies have affirmed that financial professionals are more likely to be financially literate than non-financial professionals (Jana, Sinha, & Gupta, 2024; Khosravi & Banitalebi Dehkordi, 2021; Moloi & Madikizela, 2018). More so, other studies have revealed non-finance professionals are less financially literate due to a lack of education, experience, and exposure (Agarwal, Chomsisengphet, & Zhang, 2017; Clark, Lusardi, & Mitchell, 2017; Sabri et al., 2021).

The study's results offer empirical evidence about insignificant results between financial literacy and financial literacy practices among NGO financial managers in KZN, which could lead to their organisations' financial vulnerability. Our study's results imply that the low level of financial literacy among NGO financial managers in KZN significantly justifies the urgent need for financial literacy training within this segment. This concurs with the findings of Hayeemaming (2022); Kartini, Fitri, Rabiyah, and Anggraeni (2021) and Noor, Batool, and Arshad (2020).

5. CONCLUSION AND CONTRIBUTION TO THE SCIENCE

The evidence showed that the poor level of financial literacy of NGOs financial managers in South Africa and elsewhere limits these entities from economically growing exponentially. Determination of whether or not there is a need for financial education and financial literacy to boost the financial knowledge of NGOs and financial managers in KZN towards achieving financial sustainability in their organizations. This was achieved through an investigation into the financial literacy status of 53 NGOs financial managers in KwaZulu-Natal. Overall descriptive statistics, regression, and correlation analysis on financial literacy status among NGOs financial managers reveal a statistically insignificant relationship between the use of all the variables to stimulate the rate of financial literacy. Relying on these empirical findings, it can be concluded that, notwithstanding the high financial literacy level of some NGOs financial managers. There is an urgent need for financial literacy education and training to enhance the financial literacy of NGOs financial managers in KZN and support their organizations' financial sustainability. Based on correlation analysis for the financial literacy study's variables, the conclusion is that there is a poor level of financial literacy among NGOs financial managers in KZN, and the P-value was less than 1%.

This article provided practical and theoretical contributions in the field of financial literacy. Firstly, the study's findings will elevate the level of financial literacy, particularly among NGOs' financial managers in KZN, as well as lead towards the financial health of the NGOs sector. Thirdly, this study will shed new light on key drivers of financial illiteracy among financial managers within the NGOs sector, which is the robust trigger for the rise of NGOs collapsing. Fourthly, applying financial literacy will enhance the status and level of financial knowledge, skills, and responsibility among NGOs financial managers in KZN concerning the capability and ability to meet an ongoing financial obligation to make the right and sound financial decisions. Fifthly, this research is fundamental to empowering NGOs financial managers with better financial literacy to take appropriate actions involving stronger financial planning and activities that could lead to better financial behaviour. This study added to the body of knowledge on the financial literacy of NGOs financial managers in South Africa. "Areas of financial literacy that require NGOs financial managers' attention were identified, and the recommended remedial action may curtail future NGOs failures in KwaZulu-Natal."

5.1. Recommendations, Limitations, and Suggestions for Future Research

To address the gaps in this particular research, there is a need to conduct thorough financial literacy capacity building among NGOs financial managers, including NGOs Board of Directors. There is further need to educate both men and women. Another exciting area is the study of financial literacy for NGOs using a longitudinal approach as they move through managerial levels. Future researchers should develop a financial literacy index on determinants of financial literacy for NGOs financial managers. Research can also explore how the level of NGOs financial managers' financial literacy impacts the success or failure of NGOs. The study was limited to NGOs financial managers who attended the conference in Pietermaritzburg, a prominent administrative city (KZN), in September 2022. The study's findings should not be generalized to other populations, such as South Africa or even the KwaZulu Natal province, because the sample was not randomly drawn. Future research could be conducted on the financial literacy of NGOs financial managers across an entire province or country. A quantitative approach was heavily relied upon in this research study. The use of a mixed-methods approach is recommended to produce robust results for triangulation.

6. DECLARATION OF INTERESTS

The authors report no conflicts of interest regarding this piece of research. Only the authors are responsible for the content and writing of this paper. Therefore, we have no conflicts of interest to disclose. The authors further state that the manuscript is honest, truthful, and transparent, and that no key aspects of the investigation have been omitted. This study strictly followed all writing ethics.

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