



Research Article

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The Interplay Between Financial Literacy, Financial Technology and Financial Behaviour of High School Teachers in an Emerging Economy

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Abstract

This study examined the influence of financial literacy and financial technology on the financial behaviour of high school teachers in an emerging economy. The use of financial technology comes with widely documented advantages, however, the increasing diversity of financial technology products available is found to have complicated many people in emerging economies. The availability of information has made it easier for people to make irresponsible financial decisions, which have resulted in higher levels of debt. While teachers play a meaningful role in financial literacy education, research points out they still need to undergo financial literacy education themselves in order to improve their financial management expertise, more so in the digital era. A scientific questionnaire was distributed to 246 high school teachers who were chosen on a probability basis using systematic random sampling. The research data were subject to correlation analysis. The results show that high school teachers have a good grasp of financial technology, and they possess strong financial literacy skills. The correlation analysis indicated that financial literacy skills are the most important attribute influencing financial behavior of high school teachers.

Keywords: Financial literacy, Financial literacy challenges, Financial education, Financial technology, Financial behaviour, High school teachers

1. Introduction

In recent years, low financial literacy levels worldwide have become an issue, partly due to the global financial crises, thus, emphasising the significance of the importance of financial literacy (Yew, Yong, Cheong & Tey, 2017). The lack of financial literacy, or the inability to understand financial concepts, can lead to poor financial decision-making and financial difficulties (Skagerlund, Stromback & Tinghog, 2018). People who are financially illiterate are not well equipped to cope with unexpected financial information that come from financial technology (Jorgensen, Foster, Jensen & Vieira, 2017).

Furthermore, low financial literacy is strongly associated with over-spending and indebtedness (Mitchell & Abusheva, 2016). Wentzel (2016) highlight that households which are over-indebted are especially at risk, as they have no ability to save or enhance their living standards. Indebtedness challenges of individuals in developing economies have attracted research globally (Botha, 2021). With the introduction of financial technology, these challenges appear to be worsening (Yew et al., 2017).

South Africa is popularly known as the rainbow nation signifying a diversity and richness of culture and tradition. However, this diverse population also exhibits enormous gaps in financial literacy between its different citizens (Botha, 2021). A large portion of the South African population have underdeveloped financial literacy skills (Sibanda & Sibanda, 2016). As such, South Africa scores poorly in international surveys on financial literacy even though there are several initiatives in the country that are aimed at growing and improving financial literacy education (Wentzel, 2016). Teachers, as educators, are important promoters of the need for financial literacy. They play a crucial role in implementing financial literacy programmes. However, in recent years, South Africa has witnessed mass resignations and early retirements of teachers from public schools. Mafukata and Mudau (2016) point out that this is largely due to financial distress and indebtedness. Compen, De Witte & Schelfhout, (2019) contend that teachers' personal professional development in financial literacy is lagging. Mafukata and Mudau (2016) add that teachers need to undergo financial literacy education themselves in order to improve their financial management expertise.

In order to provide effective financial education, it is important to have high-quality teachers, and several factors have been shown to contribute to this effectiveness. Teacher confidence is crucial to an effective financial education, since it has been demonstrated that teacher efficacy negatively impacts aspects such as instruction behaviour and student achievement (De Moor & Verschetze, 2017). The need to investigate the influence of financial literacy and financial technology on the financial behaviour of teachers is important since teachers are role models who can influence learners' financial knowledge and skills on how to manage their finances. The goal of study was to evaluate the relationship between financial literacy, financial technology and financial behaviour of high school teachers within the Msunduzi Municipality, KwaZulu-Natal, South Africa. This study may make high school teachers more aware of their need for improving their own financial literacy and that of their students. Research on establishing the relationship between financial literacy, financial technology on the financial behaviour of high school teachers raises an awareness of these issues to government and policy makers. Therefore, this study also adds to the paucity of research on financial literacy and financial behaviour on teachers in the era of financial technology.

2. Literature Review

2.1 *The South African Basic Education conundrum*

Financial literacy amongst the majority of South Africans is low due to the previous "bantustan" education system which was propagated by the previous apartheid regime which subjected black people to poor education (Matemane, 2018). According to Amnesty International (2020), South Africa has done well to uplift the standard of living of black people after independence including building a considerable number of schools across the country. However, the expansion of access to education for black people does not necessarily mean or translate to increased accessibility to good quality education for all black people (Amnesty International, 2020). Consequently, the educational system continues to reflect the socioeconomic inequalities within the country. Furthermore, South Africa has a number of financial education programmes and initiatives. However, these programmes lack unification and focus of efforts amongst different stakeholders (Ifeanyi, Rena & Prinsloo, 2019). The programmes are not supported by research on how to properly deliver and implement them, with most programmes being narrow, lacking depth and failing to represent South Africa's national interests, and lastly are not governed by best practices and standards for financial literacy education

(Ifeanyi et al., 2019). Consequently, there are not many financial literacy programmes at national level that are specifically designed for teachers/educators for long term results.

The South African Basic Education Department is facing a crisis as teachers are leaving the profession prematurely (Mafukata & Mudau, 2016: 2243). The aforementioned authors add that about 4000 teachers leave the profession annually. Some of the reasons cited for teachers' resignations include "the search for pension pay-outs that would redeem them from indebtedness" (Compen et al., 2019). This mass resignation of teachers creates a serious problem in the education system that not only affects the quality of education but also increases recruitment, training and development costs (Mafukata & Mudau, 2016; Sibanda & Sibanda, 2016). Moreover, Compen et al. (2019) argue that the South African educational system is challenged by a shortage of highly skilled and experienced teachers in critical subjects such as Mathematics, Science, and Technology. Financial literacy has been found to play a very important role in the school curriculum of students who study Economics, Mathematics, and Accounting, as these subjects contain numbers (Ballantine, Hammack & Stuber, 2017). The Organization for Economic Co-operation and Development (OECD) recommends that financial literacy education be taught in schools from the earliest age possible so that people can make better decisions about their finances (Sawatzki & Sullivan, 2017). Students who are taught financial literacy from an early age develop the necessary knowledge and skills to build responsible financial habits throughout their education (Ballantine et al., 2017).

2.2 Review of related studies and hypotheses development

- **Financial literacy**

Financial literacy plays an important role in financial behaviour because it influences consumer spending, saving practices, and financial decision-making (Chu, Wang, Xiao & Zhang, 2017). Financial literacy is defined by Ripain, Amirul & Mail (2017) as "a combination of awareness, knowledge, skills, attitude, and behaviour necessary to make sound financial decisions and ultimately achieve individual wellbeing". Financial literacy is useful in daily activities; an understanding of financial information can be useful for financial decision making which may include financial planning, investment and wealth accumulation, debt management and pension planning (Husna & Desiyanti, 2016). In order to make rational and effective financial and economic decisions, one needs financial skills (Agustina, 2016). A person with good financial knowledge is in a position to manage their finances well. Henager-Greene & Cude (2016) and Agustina (2016) found that financial literacy has a significant positive effect on financial behaviour because a financial literate individual has the competence and confidence to use their financial knowledge in order to make informed and beneficial financial decisions.

H1: Financial literacy challenges have a negative relationship with financial behaviour.

- **Financial behaviour**

Financial behaviour is the attitude and behaviour of an individual towards management of finances and is related to how an individual save, spends, budgets, and invests his/her finances (Jorgensen et al., 2017; Xiao & Porto, 2017). An individual can have either a positive or negative financial behaviour which can be categorised as responsible financial behaviour or risky financial behaviour respectively (Barbić, Lučić & Chen, 2019). In view of this, responsible financial behaviour is associated with checking one's credit ratings on a regular basis, saving money, and using a financial plan to manage expenses; whilst, risky financial behaviour is characterised by excessive spending and wastage of financial resources which may lead one to incur huge debts and/or to become broke (French & McKillop, 2016).

H2: Higher levels of financial literacy have a positive relationship with financial behaviour.

- **Financial technology**

Financial technology is the combination of finance and information technology (Zavolokina,

Dolata & Schwabe, 2017). This could be any technology that delivers financial services such as online banking, mobile wallets, payments apps, money transfers and managing investments by utilising the internet and software (Leong & Sung, 2018). It is any innovative ideas that improve financial service processes by proposing technology solutions according to different business situations, while the ideas could also lead to new business models or even new businesses (Leong & Sung, 2018; Feyen, Frost, Gambacorta, Natarajan & Saal, 2021). The increasing diversity of financial technology products available has complicated South Africans' financial behaviour (Lin, Bumcrot, Ulicny, Mottola, Walsh, Ganem, Kieffer & Lusardi, 2019). Consumers in South Africa tend to spend more money because there's more access to financial technology, leading to irresponsible spending, including lack of saving, poor investment, emergency fund planning, and insufficient budgeting (Younas, Javed, Kalimuthu, Farooq, Khalil-ur-Rehman & Raju, 2019). This convenience may have a negative influence on the financial behaviour of households as they are able to access money more easily to spend, leading to less savings in the future (Mitchell & Abusheva, 2016; Bonga & Mlambo, 2016).

H3: Higher levels of financial technology knowledge have a positive relationship with financial behaviour.

The above three hypotheses form the conceptual framework depicted in Figure 1.

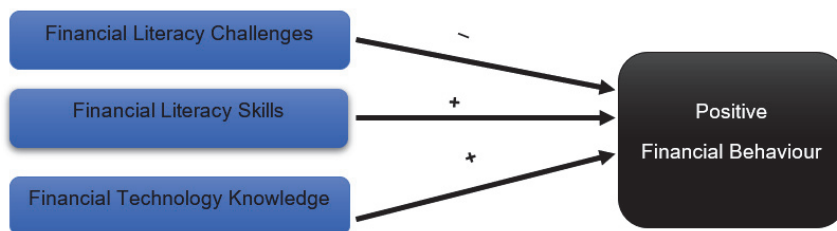


Figure 1: The conceptual framework of the study

The conceptual framework illustrates the relationship between financial literacy challenges, financial literacy skills and financial technology knowledge. It is postulated that financial literacy challenges have a negative relationship with positive financial behaviour. The reasoning behind this is that individuals who face a lot of financial literacy challenges are less likely to exhibit positive financial behaviour. Secondly, individuals that possess greater financial skills are more likely to exhibit positive financial behaviour. This is because financial skills are integral in helping individuals to make informed financial decisions which are expected to result in a positive financial behaviour. Lastly, greater financial technology knowledge is postulated to have a positive relationship with financial behaviour. This suggests that individuals who possess financial technology knowledge are more likely to use the financial technology to make good financial decision using various technology tools, such as scheduled payments, fixed deposits, savings accounts that are not immediately accessible, financial calculators and other tools available to assist individuals, to exhibit positive financial behaviours.

3. Theoretical Framework

The theoretical framework underpinning this study is the theory of planned behaviour. This theory tries to simplify the complexities of human social behaviour in an effort to understand their behavioural patterns in an effort to understand how individuals make their decisions (Xiao & Wu, 2008). Individuals with positive financial behaviour are likely to be more responsible and are able to use their finances effectively. In view of this, financial literacy can be considered as an ability which

helps those individuals who possess it to make good, practical and informed decisions that are aligned to their long term financial interests (Barbić, Lučić & Chen, 2019). In light of this, being financially literate helps one to be able to manage and control his/her finances by making proper decisions on whether to spend, save, invest or cover financial obligations such as debt (French & McKillop, 2016). The theory of planned behaviour can, therefore, be used to describe and explain the financial behaviour of individuals.

The theory of planned behaviour suggests that the behaviour of individuals emanates from planned intention towards that behaviour (Ajzen, 1991). Furthermore, the theory postulates that human behaviour is influenced by behavioural beliefs, normative beliefs and control beliefs (Ajzen, 1991). The behavioural beliefs that one has shapes the attitudes that one may have towards financial behaviour. In addition, the normative beliefs are related to an individual's perception about how a behaviour (in the context of this study, this is financial behaviour) would be judged by others in society. Besides, the control beliefs that an individual has, shape their perceptions on their ability to control their behaviour (financial behaviour) by virtue of their perceptions on whether controlling their behaviour is going to be easy or difficult.

Therefore, the theory of planned behaviour can be useful in understanding how financial literacy and financial technology impact the financial behaviour of teachers. Consequently, the attitudes and perceptions that teachers have on financial literacy and financial technology can have an influence on their financial behaviour. Teachers that have a positive attitude toward financial literacy and see its value and importance in positively influencing their financial behaviour, are more likely to seek and acquire it so as to improve their financial behaviour. Similarly, teachers who have a positive perception on financial technology are more likely to desire to learn about it and utilise it to enhance their financial behaviour because they have a positive perception of it.

4. Research Methodology

This study quantitatively analysed the influence of financial literacy and financial technology on the financial behaviour of high school teachers in KZN as rooted in the positivist paradigm (Sekaran & Bougie, 2016). The study had a sample size of 246 high school teachers from a population size of 793 high school teachers. To determine the sample size based on 95% confidence level with 80% proportion of target population at 0.005 acceptable margin of error, the following formula was used: $N = \{ Z^2 * \Sigma^2 * [N / (N - 1)] \} / \{ ME^2 + [Z^2 * \Sigma^2 / (N - 1)] \}$. Where N= Sample Size; Z= Confidence Level; Σ = Alpha; P= Proportion and ME= Margin of error.

This study used systematic random sampling, in order to ensure that all members of the subpopulation have an equal chance of being selected (Kumar, 2019). Regression and correlation analyses and ANOVA tests were conducted used to determine whether there is statistically correlation between financial literacy, financial technology, and the financial behaviour of the school teachers (Sekaran & Bougie, 2016). Cronbach's Alpha test was performed to define the reliability of the survey questionnaire. The results indicate that the Cronbach's alpha for financial literacy challenges, financial literacy skills and financial technology knowledge were 0.921, 0.899 and 0.765 respectively. According to Heale & Twycross (2015), Cronbach's alpha values of 0.7 and above are acceptable as reliable.

5. Ethical Considerations

Ethical standards for research were ensured by obtaining ethical approval from the Faculty Research Ethics Committee of a public University.

6. Data Analysis and Result Discussion

The regression analysis is presented followed by the correlation analysis. Regression analysis

determines how one variable affects the other, while correlation analysis determines the inter-connection between the variables. The independent variables are financial literacy challenges, financial literacy skills, financial technology knowledge and the dependent variable is financial behaviour.

6.1 Regression analysis

To determine a value for financial behaviour, the following unstandardised prediction model using Ordinary Least Squares (OLS) was used. OLS minimizes the squared distances between the observed and the predicted dependent variable y :

$$S(\beta) = \sum_{i=1}^N (y_i - x_i^i \beta)^2 = (y - X\beta)^i (y - X\beta) \rightarrow \min_{\beta}$$

The resulting OLS estimator of β is:

$$\hat{\beta} = (X^i X)^{-1} X^i y$$

Given the OLS estimator, we can predict the dependent variable by $\hat{y}_i = x_i^i \hat{\beta}$ and the error term by $\hat{U}_i = y_i - x_i^i \hat{\beta}$. \hat{U}_i being the residual.

For this study, the unstandardised prediction equation was calculated as follows:

$$\hat{Y} = -0.808 + 0.060_{FLC} + 1.260_{FLS} - 0.040_{FTK}$$

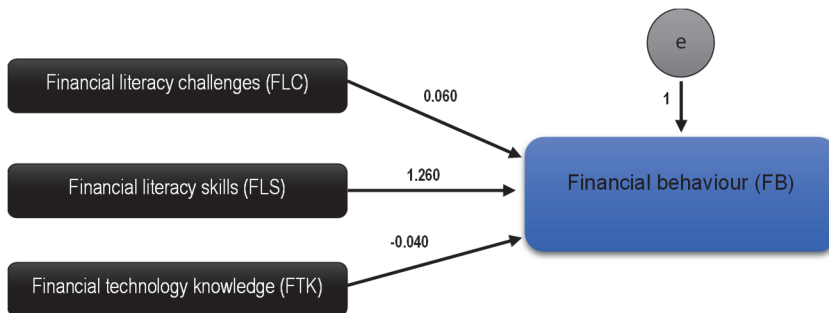


Figure 2: Unstandardised prediction relationship

The unstandardised prediction relationship shown in Figure 2 and the equation above show that a positive change in the financial literacy challenges variable holding other variables constant will lead to a 0.06 change on average in financial behaviour but is not significant at the 0.05 level. Furthermore, holding the other variables constant, a positive change in the financial literacy skills variable will result in a 1.26 change in average financial behaviour, which is statistically significant at the 0.01 level. A positive change in financial technology knowledge variable while keeping other variables constant will lead to -0.4 change in financial behaviour on average, but that change is not significant at the 0.05 level. In this context, financial literacy skills tend to be the strongest predictor of financial behaviour which corroborate the literature (Yong et al., 2018; Chu et al., 2017). Table 1 shows the summary of the results for the model.

Table 1: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson	
					R Square Change	F Change	df1	df2		Sig. F Change
1	.794 ^a	.630	.625	.555	.630	137.371	3	242	.000	2.225

a. Predictors: (Constant), Financial technology knowledge, Financial literacy challenges, Financial literacy skills
b. Dependent Variable: Financial behaviour

Table 2 presents the results of the regression analysis. It shows that while the other factors remain constant, a positive change in financial literacy challenges results in a 0.06 change in average financial behaviour, which is not significant at the 0.05 level. Also, if you hold all other variables constant, a positive change in financial literacy skills will result in a 1.26 change in average financial behaviour, which is significant at the 0.01 level. Furthermore, a positive change in financial technology knowledge will result in a -0.4 change in average financial behaviour when all other factors are held constant, but this is not significant at the 0.05 level. In light of this, the results indicate that financial literacy skills have the strongest predictive relationship with financial behaviour affirming previous studies.

Table 2: Coefficients^a

Model	Unstandardized Coefficients		Standardised Coefficients	T	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	-.808	.287		-2.816	.005	-1.374	-.243					
Financial literacy challenges	.060	.044	.056	1.379	.169	-.026	.146	-.133	.088	.054	.930	1.076
Financial literacy skills	1.260	.070	.818	18.094	.000	1.123	1.397	.792	.758	.707	.748	1.336
Financial technology knowledge	-.040	.058	-.030	-.683	.495	-.155	.075	.332	-.044	-.027	.790	1.266

a. Dependent Variable: Financial behavior

The results in Table 1 shows that the independent variables in the multiple regression model explains 62.5% of the variance in the dependent variable which is significant at the level 0.01. To further test the regression model, an ANOVA test was performed to determine whether a relationship exists between the variables. These results are shown in Table 3.

Table 3: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	127.103	3	42.368	137.371	.000 ^b
Residual	74.637	242	.308		
Total	201.740	245			

a. Dependent Variable: Financial behaviour
b. Predictors: (Constant), Financial technology, Financial literacy challenges, Financial literacy skills

Table 3 shows that the F statistic is >1. The high F-value indicates a high variation between the means of the sample relative to the variation within the samples as the higher the F-value, the lower is the p-value. As p <.001, the differences are statistically significant.

6.2 Correlations

To further explore the relationship between the variables, the correlations between the variables were calculated. These results are shown in Table 4.

Table 4: Correlations

		Financial Literacy challenges	Financial Literacy skills	Financial Technology knowledge	Financial behaviour
Financial literacy challenges	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	246			
Financial literacy skills	Pearson Correlation	-.230**	1		
	Sig. (2-tailed)	.000			
	N	246	246		
Financial technology knowledge	Pearson Correlation	.018	.442**	1	
	Sig. (2-tailed)	.783	.000		
	N	246	246	246	
Financial behaviour	Pearson Correlation	-.133*	.792**	.332**	1
	Sig. (2-tailed)	.038	.000	.000	
	N	246	246	246	246
** Correlations is significant at the 0.01 level (2-tailed).					
* Correlations is significant at the 0.05 level (2-tailed).					

Table 4 shows financial literacy challenges to be weakly negatively correlated ($r = -0.230$) with financial literacy skills and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that as teachers gain more financial literacy skills the financial literacy challenges that they face are more likely to lower due to his/her enhanced financial capabilities or competencies. Moreover, individuals who have low financial literacy skills are associated with over spending and over indebtedness as they are unable to make sound financial decisions (Mitchell & Abusheva, 2016). This suggests that an individual with low financial literacy skills leads is expected to face higher financial literacy challenges. In this regard, a person with higher levels of financial literacy skills will ultimately have limited or no financial literacy challenges. Consequently, as the financial literacy skills of an individual increase, their financial literacy challenges are correspondingly reduced, and this is consistent with the findings in this study.

Financial literacy challenges were weakly negatively correlated ($r = -0.133$) with financial behaviour and this correlation being significant at the 0.05 level (2-tailed). This finding suggests that as a person's financial literacy challenges are reduced, the more the person is likely to have good financial behaviour and vice versa. It is reported that people with higher levels of financial literacy are able to plan for retirement, are likely to actively participate in the stock market, are able to manage their debt better, are able to borrow at a lower cost, are able to come up with better debt management strategies and are less likely to suffer from financial distress (Bourainy, Ashraf & Marwa, 2021). This implies that individuals with lower financial literacy challenges are more likely to exhibit good financial behaviour which is consistent with the finding in this study.

Financial literacy skills were moderately positively correlated ($r = 0.442$) with financial technology knowledge and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial literacy skills is more likely also, to have higher levels of financial technology knowledge and vice versa. According to Lawlor (2018), an individual with good financial literacy skills is able to make informed financial decisions and is more likely able to compare similar financial products and select the best choice (Umamaheswari et al., 2021). In this regard, the process of acquiring financial literacy skills may also leads to obtaining financial technology knowledge. Therefore, a positive correlation between financial literacy skills and financial technology knowledge is consistent with the literature.

Financial literacy skills were strongly positively correlated ($r = 0.792$) with financial behaviour, and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial literacy skills is more likely to exhibit good financial behaviour and

vice versa. Chu et al. (2017) found that households with higher levels of financial literacy are able to plan and manage their funds effectively and as such, they exhibit good financial behaviour. This is also consistent with Umamaheswari, Kumar, Balu and Adugna (2021); Zins and Weill (2016); Demirguc-Kunt, Klapper, Singer and Ansar (2018) who asserted that higher levels of financial literacy lead to good financial behaviour. Nonetheless, Farida, Soesatyo and Aji (2021) argue that financial literacy may be acquired by an individual, but if s/he does not put it into practice then it would not lead to good financial behaviour. This suggests some people may acquire financial literacy but may decide not to use it to their advantage.

Financial technology knowledge was weakly positively correlated ($r = 0.332$) with financial behaviour, and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial technology knowledge is more likely to exhibit good financial behaviour and vice versa. According to Younas et al. (2019), financial technology knowledge is one of the factors that influences financial behaviour. Typically, financial technology knowledge allows individuals to conduct online financial activities and also helps them to protect themselves against cybercrime which may help them to exhibit good financial behaviour by accessing and leveraging various financial technology products (Younas et al., 2019). It has also been reported that financial technology knowledge may also lead certain individuals to conduct bad financial behaviour by using financial technology products to conduct irresponsible spending such as poor investment, emergency fund planning and poor budgeting (Idris, Krishnan & Azmi 2017; Younas et al., 2019).

7. Conclusions about the Hypotheses

As the aim of this study was to evaluate the relationship between financial literacy, financial technology and financial behaviour of high school teachers, the following section concludes on the hypotheses whether there is a relationship between financial literacy challenges, financial literacy skills, financial technology and financial behaviour.

H1: Financial literacy challenges have a negative relationship with financial behaviour.

Financial literacy challenges were weakly negatively correlated ($r = -0.133$) with financial behaviour and this correlation being significant at the 0.05 level (2-tailed). This finding suggests that as a person's financial literacy challenges are reduced, the more the person is likely to have good financial behaviour and vice versa.

H2: Higher levels of financial literacy have a positive relationship with financial behaviour.

Financial literacy skills were moderately positively correlated ($r = 0.442$) with financial technology knowledge and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that a person with a higher level of financial literacy skills is more likely to exhibit good financial behaviour, and a person with good financial behaviour is more likely to exhibit higher levels of financial literacy skills.

H3: Higher levels of financial technology knowledge have a positive relationship with financial behaviour.

Financial technology knowledge was weakly positively correlated ($r = 0.332$) with financial behaviour, and this correlation was significant at the 0.01 level (2-tailed). This finding suggests that those with higher levels of financial technology knowledge, are also more likely to display good financial behaviour, and those with good financial behaviour, are more likely to have higher levels of financial technology knowledge.

8. Limitations of the Study

Creswell and Creswell (2017) note that all research has limitations as a result of the constraints placed on the researcher. In this study too, there were constraints placed upon the researchers. To achieve the research, aim and objectives, the researchers made every effort to ensure that highly reliable and valid data were collected. The findings of the study were limited within high school teachers in

Msunduzi Municipality and may not necessarily be generalised to other municipalities within the country. The views and understandings reflected in this study are based on their own experiences. It is possible that other high school teachers might have different views on the same topic. Furthermore, due to the fact that perspectives are largely based on personal observations, the reliability factor will be much lower, and so replication of the same study is not likely to yield the same results. As the study targets teachers in Msunduzi Municipality in KZN, the target population of this study is not representative of the country as a whole. The study also relied on honest feedback from participants. There is also the possibility that participants may have misinterpreted or misunderstood the questions. Although there are some limitations to this study, this study does not negatively affect its contribution to existing knowledge.

9. Implications

This study revealed that most of the teachers in Msunduzi Municipality have sound financial management skills that allow them to mitigate and navigate financial literacy challenges that they encounter. The results of this study may make high school teachers more aware of the importance of improving their own and their students' financial literacy. Furthermore, some of the teachers indicated that they had a good grasp of financial technology services, but also indicated that their knowledge of financial technology made it easier for them to access and spend the money; this led to poor saving and negative financial behaviour. These findings will help the teachers to increase their own financial awareness in order to meet both their personal and professional needs and be more aware when using financial technology. In this study, the high school teachers were made aware of how financial literacy and financial technology affected their financial behaviour, which may help improve their productivity and increase their knowledge about the importance of financial literacy skills. Given that the study focused on high school teachers, in terms of their financial decision-making capacity and influence, this study's findings are extremely valuable for understanding this group of people. All stakeholders with responsibility for the country's financial stability need to know about this and make appropriate policy decisions.

10. Recommendations

10.1 Recommendations for high school teachers

The recommendations for high school teachers based on the findings of this study are as follows:

- Training and/or courses that teachers are exposed to should incorporate financial literacy for teachers so as to equip them with the necessary skills that they could use to teach their students. Governments must create programmes to assist teachers to gain more financial literacy so that they may be able to transfer that knowledge to their students.
- Most teachers found it hard to find solutions when facing financial challenges. It is therefore recommended that the teachers should seek training on problem solving techniques. This may help the teachers to identify the root cause of their financial challenges thereby increasing the odds of finding appropriate solutions.
- It is recommended that the teachers should keep themselves updated with the current tricks and scams that fraudsters and scammers are using. This will help them to identify suspicious activities that may compromise their internet banking security. Moreover, banks often update their clients with the current methods that fraudsters and scammers are employing to trick unsuspecting victims. In view of this, teachers should always read the banking crime reports released by banks so that they keep their hard-earned money safe.

10.2 Recommendations for future research

As already mentioned, the population of this study was taken from Msunduzi Municipality in KZN, and the results may not be representative of the entire population of high schools in South Africa. Therefore, future studies that examine the same concepts in other high schools in different municipalities in the country would help to verify some of the findings in this study. This may also help to make the findings generalisable for all high school teachers in South Africa.

A quantitative approach was used in this study. As a result, it is suggested that another study should be conducted using a mixed methodology, which would help to expand the corpus of knowledge in this area. Moreover, data collection was carried out by completing questionnaires by the participants. Therefore, the use of other approaches such as interviews could also provide valuable information concerning respondents' perceptions. Nonetheless, the results should be further investigated to ascertain if indeed these teachers have sound financial literacy and knowledge as they purported and whether they are able to teach financial literacy education.

11. Acknowledgement

11.1 Competing interest

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

11.2 Authors' contribution

Working under the supervision of C.J.N. and L.J.S., N.P.J. conceptualised the research project, collected and analysed the data. All authors contributed equally in final write up of this article.

11.3 Funding information

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11.4 Data availability

The data collected are available at the Durban University of Technology, Department of Financial Accounting.

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