Financial Capability of Accounting Students in South African Universities

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Abstract: This study surveyed 1582 students studying Accounting degrees at universities in South Africa to assess their financial capability levels and intra-component drivers of financial capability. The study utilised statistical methods such as structural equation modelling technique was used to determine drivers of financial capability; regression analysis was further done to examine relationships between the students' mean percentage scores and their socio-demographic factors. The findings of the study suggest that accounting students are highly financially capable. It was further found that financial capability is driven by financial attitude; financial behaviour, and numeracy skills of the accounting students. In addition, the study found education, level of study, and race as statistically significant and socio-demographic influences of financial capability. This study suggests that financial capability can be further improved via improvements in financial attitude, financial behaviour, numeracy skills and education among racial groups in South Africa.

Keywords: Financial capability, financial behaviour, financial knowledge, financial attitude, Numeracy skills, accounting students.

1. INTRODUCTION

There is a continual global call for improved financial literacy among nations in order to improve financial behaviour and avoid such crisis as the global financial crisis. The World Bank defines financial capability as an individual's capacity to behave in their best financial interests, given socio-economic conditions. It encompasses the knowledge (literacy), attitudes, skills and behaviours of consumers in managing their resources, and understanding, selecting and making use of financial services that meet their needs (Zottel, 2013). In their study on the financial capability of low-income millennials, West and Friedline (2016) define this concept as an individual's ability to adopt healthy financial behaviours in an institutional context with opportunities that facilitate such behaviours. The authors further identify financial knowledge and financial inclusion as the two foundational pillars of financial capability. Consequently, Sherraden *et al*. (2015) are of the view that being financially capable helps individuals to accumulate the financial assets that are necessary for their long-term financial security.

From a broader perspective, financial capability plays a vital role in financial stability, financial inclusion and the effective functioning of financial markets (Zottel, 2013; Lusardi and Mitchell, 2014). It is also a vital ingredient in promoting financial stability at the household level (Lusardi, 2011; Sherraden, 2013). It is for this reason that it has received increased attention from governments and policymakers in both developing and advanced economies (Lusardi and Mitchell, 2014). Lusardi (2011) suggests that financial capability can be measured from the perspective of how households make financial decisions such as making ends meet, budgeting and choosing and managing financial products as well as having the requisite skills and knowledge of financial matters. Financial capability also improves financial stability by curbing growing economic inequalities among households (Sherraden, 2013).

This study surveyed accounting students in universities within the KwaZulu-Natal province of South Africa. The core inquiry of this study was to ascertain the levels and intra-component drivers of financial capability (financial knowledge, financial attitude, financial behaviour and numeracy skills) among accounting students at universities in South Africa with a focus on the KwaZulu-Natal universities. Within this perspective, the objectives of this study were to: (1) establish the levels of financial capability (financial knowledge, financial attitudes, financial behaviour and numeracy skills) among accounting students at universities in KwaZulu-Natal, (2) determine the intra-component drivers of financial capability among accounting students at universities in KwaZulu-Natal, (3) evaluate the relationship between financial capability and the students' socio-demographic characteristics (4) provide empirical evidence that is

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relevant to the development of strategies necessary to improve the financial capability of the students.

The next section covers both the theoretical and empirical literature on financial capability, followed by the research methodology, the findings and results of the analysis. The final section contains the conclusion reached based on the study findings.

2. LITERATURE REVIEW

The capability approach is a broad normative framework that facilitates the evaluation and assessment of the well-being of individuals in social contexts (Robeyns, 2005; Sherraden *et al*., 2015). This framework is necessary for the formulation of policies and implementation of social change within society (Robeyns, 2005). As a normative rather than an explanatory theory, the capability approach is not designed to explain inequality, poverty, or individual well-being, but rather to conceptualise the notions therein (Robeyns, 2016). The term capability was developed in the seminal work of distinguished philosophers Amartya Sen and Martha Nussbaum. Winner of the Nobel Prize in Economic Sciences in 1998, Sen (1987) conceptualised capabilities as notions of freedom which are illustrated in presenting individuals with real opportunities to lead the type of life they want. He clarified that the normative crux of the capability approach could be understood in the following ways (Robeyns, 2016) (1) The assessment of individual well-being; (2) The evaluation and assessment of social arrangements; (3) The design of policies and proposals about societal social change.

Nussbaum (2000) examined how capability affects human development and individual welfare within a social context. This combined capability approach is made up of both internal capacity as well as external conditions. While internal capabilities comprise of an individual's skills set, knowledge and ability, external capabilities consist of a plethora of opportunities available to such individual in the form of access to products, institutions and services within society (Sherraden *et al*., 2015). Nussbaum (2000) added that the combined capability approach provides a platform of opportunities to all individuals within society via policies, laws, regulations and welfare incentives that improve the general well-being of individuals in society. The general capability approach comprises of two clusters that depict individual capability and commitment to a set of five principles, namely (Nussbaum, 2011) (1)Treating each person as an end; (2) A focus on choice and freedom instead of achievements; (3) Pluralism about values; (4) Being deeply concerned about social justices; and (5) Ascribing an urgent task to the government.

In contextualising the capability approach from the perspective of financial capability, Sherraden *et al*. (2015) are of the view that financial capability is both an individual and structural idea, as the approach emphasises the environmental factors that influence individual capability. In a similar vein, (Johnson and Sherraden, 2007; Sherraden *et al*., 2015) regard financial capability as the fusion of an individual's ability to act, coupled with their opportunity to act in their best interests. Hence, financially capable individuals are not only financially literate but also have access to beneficial financial products and services that contribute to their financial functioning, well-being and life chances (Sherraden *et al*., 2015).

Zottel (2013) asserts that financial capability encompasses the financial knowledge, financial attitudes and skills as well as the financial behaviours of consumers with regard to managing their resources, and understanding, selecting and making use of financial services that meet their needs. Moreso, It has been said that financial capability can improve both financial decision making as well as access to suitable financial products and services, which are the two defining elements of financial inclusion (Mitton, 2008). This view is in consonance with the combined capability approach, which posits that both internal capacity and external conditions affect the capability of individuals (Nussbaum, 2000). Hence, financially capable individuals are not only financially literate but also have access to financial products and services that contribute to their financial functioning, well-being and life chances (Sherraden *et al*., 2015).

Loke *et al*. (2015) suggest that the youth's financial capability can be improved via financial education programmes. Their study surveyed 275 economically disadvantaged youths who participated in the MyPath Savings Initiative, a youth development and employment programme that encourages first income earners to save through traditional financial products. The study found that improvements in financial capability are not related to socio-demographic factors such as race, age, gender, household income, etc. (Loke *et al*., 2015).

Some studies have established a link between financial knowledge and financial capability (Brown *et*

al., 2014; Drever *et al*., 2015; Xiao and O'Neill, 2016; Xiao and Porto, 2017). For instance, Xiao and O'Neill (2016) investigation of the impacts of financial education on the financial capability of Americans, found that consumers who are financially knowledgeable exhibited better financial capability. However, some authors have argued that financial knowledge is not sufficient to guarantee positive financial behaviour among young adults and that parental influence as well as self-discipline, are key determinants of positive financial behaviours (Tang and Peter, 2015; Friedline and West, 2016).

On the other hand, several recent studies have found low levels of financial knowledge among college students (Jayakumar *et al*., 2017; Andreou and Philip, 2018; Brooks and Wheeler, 2018; Anderson *et al*., 2018), others have suggested that these students have good financial knowledge (Sarpong-Danquah *et al*., 2018). Jayakumar *et al*. (2017) cross-sectional survey of first- and fourth-year students across seven American medical schools found that the students were not financially knowledgeable, despite the provision of financial counselling for the fourth-year students. Sarpong-Danquah *et al*. (2018) investigated the level of financial literacy among students across tertiary institutions in Ghana. The study sampled 480 students via a self-administered questionnaire. It was found that the majority of the students were highly knowledgeable about savings and investment-related issues but had little knowledge of insurance. The authors recommended the inclusion of financial education programmes in tertiary curricula, regular seminars to promote financial awareness and the use of digital platforms to improve students' financial knowledge.

In terms of spending and credit, Chmelíková (2016) confirmed that students' experience of loans was a key determinant of their debt behaviours. Americans across all age groups have low levels of debt literacy (Lusardi and Tufano, 2015; Brown *et al*., 2016). This is worrying as sparse knowledge of how debt works tend to result in bad decisions (Lusardi and Tufano, 2015). Brown *et al*. (2016) assert that poor debt behaviour among young American students is a result of their poor financial capability. Financial knowledge can prevent poor debt choices as well as being vulnerable to financial scams (Andreou and Philip, 2018).

Harrison *et al*. (2015) qualitative study on debt attitudes among young university students in England, found that only a third of the students believed that managing their day-to-day expenses is pivotal to controlling and minimising their debt. Manju (2016) survey among 240 Indian students between the ages of 16 and 22 found that most of the students displayed poor money management skills as they spent most of their income on pleasure and fast food rather than on savings and books. It was further found that only half of the students utilised personal budgets and that female student had better money management skills than male students. French and McKillop (2016) argue that poor money management skills contribute to the high rate of indebtedness among individuals. Harrington *et al*. (2017) suggest that budgeting behaviours can be encouraged among business students by teaching them how to use low-effort personal budgets to avoid overspending.

While some studies have found that university students have good financial behaviour (Thapa, 2015), others have concluded that they do not (Allgood and Walstad, 2016; Chmelíková, 2016; Harrington *et al*., 2017). Chmelíková (2016) found that the experience of budgeting could influence the financial behaviour of university students. Poor financial behaviours such as overspending can be addressed by teaching and encouraging budgeting behaviours among university students (Harrington *et al*., 2017). Although Tang and Peter (2015) found a weak relationship between financial knowledge and financial behaviour and suggested that this could be due to parental influence and self-discipline, Shih and Ke (2014) found that general financial knowledge influences students' financial behaviours. Angus (2018) suggests that providing financial counselling to university students experiencing financial stress can produce positive results. Herawati *et al*. (2018) considered the effects of financial literacy, financial self-efficacy and the socio-economic status of students' parents on the financial behaviours of accounting students in Bali, Indonesia. The study found all three variables to have a positive relationship with the students' financial behaviour.

Lusardi and Wallace (2013) on the other hand, highlight that being capable of making good financial decisions is dependent on quantitative literacy. This was found to be true among both high school students as well as university students in different countries such as the US, Romania, France, Switzerland, Australia, etc. Sadly, it has been found that numeracy capabilities among the general population worldwide are relatively low, with certain segments of the population such as the older generation, individuals with low academic qualifications, and women exhibiting particularly low levels (Lusardi, 2012).

Literature provides evidence on how financial capability interacts with socio-demographics. These socio-demographics include gender, age, education, income, race, parent's income and parent's education. While Thapa (2015) found that there is no significant relationship between gender and financial capability, while Agnew and Harrison (2015) concluded that gender was the only consistent factor in understanding college students' debt behaviours in both New Zealand and England. This was similar to findings of some South African studies which found gender to be statistically significant among students studying accounting degrees in South African universities (De Clercq and Venter, 2009; Oseifuah and Gyekye, 2014). In addition, while Oseifuah and Gyekye (2014) further asserts that male students at the University of Limpopo are more financially capable than female, this finding was in contrast with (Fatoki, 2014), who found that female students enrolled in a non-business degree at two South African universities had better financial capability than their male counterparts.

Except for studies like Özdemir *et al*. (2015), most studies have found a positive relationship between college students' age and their financial capability (De Clercq and Venter, 2009; Xiao *et al*., 2015). In a study conducted among South African students studying to become Chartered Accountants, found that there is a positive relationship between age and financial decisions (De Clercq and Venter (2009). Xiao *et al*. (2015) found a positive relationship between age and financial capability. The study measured financial capability using five variables: objective financial literacy, subjective financial literacy, desirable financial behaviour, perceived financial capability and a financial capability index based on data from the US 2012 National Financial Capability Study. The youngest age group (18-24) exhibited the lowest score across all measures of financial capability.

Ansong and Gyensare (2012) found that levels of study and educational attainments do not influence the financial capability of university students in Ghana, while Shahrabani (2013) found that students studying economics and business-related degrees in Israel were much more financially inclined than their peers in other disciplines and concluded that a student's field of study can significantly affect his/her financial capability. Albeerdy and Gharleghi (2015a) found evidence of a strong relationship between the level of education and the financial literacy of college students in Malaysia. However, Botha (2013) asserted that there is no relationship between students' field of study and their financial capability. The author found that South African university students enrolled in both finance and non-finance postgraduate diploma programmes had low levels of financial literacy. Likewise, Chmelíková (2016) concluded that students' financial capability was more influenced by their experience of financial decision making rather than their level of education and other socio-demographic factors.

De Clercq and Venter (2009) found that there is a positive relationship between income and the financial literacy of South African students studying to become Chartered Accountants. Ansong and Gyensare (2012) concluded that work experience influences students' personal financial decision making, as postgraduate students who earn an income independent of family sources exhibited better financial capability than those that depended on their parents. de Bassa Scheresberg (2013) found that financial capability is particularly low among young adults who are less educated and earn a lower income. This was based on a national study on the financial capability of more than 4 500 individuals. Thapa (2015) asserts that students' income is a key factor in determining their financial capability. De Clercq and Venter (2009) found that there is a positive relationship between race and the financial literacy of South African students studying to become Chartered Accountants. Shahrabani (2013) found that Jewish students had better financial literacy than Arabian students. While the former had an overall mean score of 50%, the latter only scored 39%. The study further concludes that nationality influences financial decision-making capabilities. Agnew and Harrison (2015) found that New Zealand students are more financially literate than native English students. Serido *et al*. (2016) found that race and ethnicity are key determinants of financial capability

Botha (2013) found that parental income was a key determinant of the financial capability of South African students. Soria *et al*. (2014) concluded that undergraduate students from low-income backgrounds are susceptible to poor financial decisions. Herawati *et al*. (2018) suggested that financial literacy, financial self-efficacy and parents' economic status impact the financial behaviours of accounting students in Bali, Indonesia. Zhu (2018) discovered that the financial capability of economically disadvantaged adolescents is largely influenced by their poor economic circumstances as well as parental financial socialisation. While Ansong and Gyensare (2012) found that the mother's level of education can impact the financial capability of university students in Ghana,

Tang and Peter (2015) suggest that the financial capability of young Americans is enhanced via the interaction of individual financial knowledge, financial experience and parental education. Hence, there is a positive relationship between parents' financial education and individual financial capability. Van Campenhout (2015) found that parental financial teaching goes a long way in the development of financial capability, and advocates for a re-evaluation of the parental role in financial socialisation within society.

Whilst the above literatures have considered financial capability in diverse contextual perspectives, there is yet no current study on the subject matter within the South African perspective. More precisely, it remains whether it is a generalisable fact that university students enrolled in financial courses, particularly accounting students in the KwaZulu-Natal Province of South Africa, will exhibit higher financial capability levels as measured by financial knowledge, financial attitudes, numeracy skills and financial behaviour.

Also, it is unclear what factors influence the financial capability of university students enrolled in financial courses, particularly accounting students in the KwaZulu-Natal Province of South Africa.

3. DATA AND RESEARCH METHODOLOGY

This research inquiry adopted a quantitative research approach, which used a questionnaire to elicit the necessary information on the financial capability of the Accounting students in KwaZulu-Natal universities. The structured questionnaire measured the levels and determinants of accounting students' financial capability, defined as financial knowledge, financial attitudes, financial behaviour and numeracy skills.

The adopted questionnaire was made up of 52 questions including demographic characteristics. It was divided into five broad categories, namely: **Part A** – Socio-demographic characteristics; **Part B** – Financial Knowledge; **Part C** – Numeracy Skills; **Part D** – Financial Attitudes; **Part E** – Financial Behaviour. Part A of the questionnaire comprised of nine questions relating to gender, age, education, income, race, parents' income and parents education. Part B of the questionnaire comprised of sixteen questions relating to savings and investments, spending and credit, income, and money management. Part C of the questionnaire comprised of six questions relating to Numeracy skills. Part D of the questionnaire comprised of eleven questions relating to Financial attitudes. Part E of the questionnaire comprised of ten questions relating to Financial behaviour. The questions adopted for the study were adapted from existing studies such as (Mandell, 2004; Skagerlund *et al*., 2018).

The population for this study included all accounting students in KwaZulu-Natal universities enrolled in three-year undergraduate programmes on a full-time basis. This consisted of first-year, second-year and third-year students registered for the 2017/2018 academic year who are pursuing Bachelor of Commerce in Accounting, Bachelor of Commerce General and National Diploma in Accounting qualifications at the selected universities. Although there are four universities in KwaZulu-Natal, this study focused on three universities with the highest student enrolment. The selected universities were: University of KwaZulu-Natal (UKZN), Durban University of Technology (DUT) and Mangosuthu University of Technology (MUT). The fourth university (University of Zululand (UNIZULU)) was excluded due to difficulties experienced in gaining access to the students.

The study adopted both simple random and convenience sampling techniques, and a total sample size of 1582 questionnaires was considered valid for the study.

In order to effectively measure the study's results were grouped using ranges and analysed in line with previous studies as (Volpe *et al*., 1996; Mandell, 1998; Huston, 2010). However, considering that these studies were conducted in developed countries and that South Africa is a developing country, the score ranges were further adjusted as shown in Table **1**.

Table 1: Capability/Knowledgeable Levels and Score Ranges

Score Ranges	Adjusted score ranges	Financial Capability Levels
80% and more	65% and more	High financial capability
60% to 79%	50% – 64%	Moderate financial capability
59% and below	Below 50%	Low financial capability

Furthermore, in order to establish the levels of financial capability (financial knowledge, financial attitudes, financial behaviour and numeracy skills) among accounting students at universities in KwaZulu-Natal. The study utilised data analysis methods such as Descriptive analysis, to examine the statistics of the data; Bivariate regression analysis, a type of statistical analysis that involves analysing two variables – in this case, socio-economic factors and financial capability; Cross-tabulations were used to analyse the relationship between financial capability and demographic variables, specifically level of study. The cross-tabulations also enabled the results for one or more variables to be analysed and compared; One-way Analysis of Variance (ANOVA) was used to analyse group mean differences between socio-demographic variables and financial capability.

Also, in order to determine the intra-component drivers of financial capability among accounting students at universities in KwaZulu-Natal, the study utilised a Factor analysis model which employed analytical methods such as the Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). While the Exploratory Factor Analysis (EFA) used multivariate statistics to detect the underlying structure of a relatively large number of variables of financial capability, the Confirmatory Factor Analysis (CFA) was used to test whether measures of a construct were consistent with the researcher's understanding of the financial capability factors (financial knowledge, numeracy skills, financial attitudes and financial behaviour).

4. THE DATA ANALYSIS AND FINDINGS

With a mean value of 1.12 and a standard deviation of 0.382, the computation in Table **2** revealed that most of the accounting students have high financial capability levels, with a capability score of 89.5%. The study also found that 8.6% of the respondents have moderate financial capability and only 1.9% exhibited a low level of financial capability. This depicts that accounting students are generally financially capable. However, these findings is in contrast to studies that have reported lower levels of financial capability among students and young adults (Mandell and Klein, 2009; Lin *et al*., 2016). Based on the descriptive analysis between the respondents' institutions and their financial capability, the results showed that 91.9% of the students from UKZN have high financial capability. This is followed by 90.4% of the students at MUT and 83.7% of the students at DUT. This breakdown is presented in Table **3**.

Respondents' Financial Knowledge

As explicated in Table **4**, the analysis of this study indicated that the majority of the respondents (63.1%) are moderately financially knowledgeable, with only 14.5% highly financially knowledgeable and 22.4% less financially knowledgeable. While several recent studies have found low levels of financial knowledge among college students (Jayakumar *et al*., 2017; Andreou and Philip, 2018; Brooks and Wheeler, 2018; Anderson *et al*., 2018), others have suggested that these students have good financial knowledge (Sarpong-Danquah *et*

Table 2: Respondents' Financial Capability

Competencies	Frequency	Percent
High Financial Capability	1416	89.5
Moderate Financial Capability	136	8.6
Low Financial Capability	30	1.9
Total	1582	100.0

Table 3: Respondents' financial capability (FC) versus institutions

Institutions	Financial Capability (FC)			
	High FC	Moderate FC	Low FC	Total
UKZN	794 (91.9%)	54 (6.3%)	16 (1.9%)	864
DUT	388 (83.7%)	56 (13.9%)	10 (2.5%)	404
MUT	284 (90.4%)	26 (8.3%)	4 (1.3%)	314
Total	1416 (89.5%)	136 (4.8%)	30 (1.9%)	1582

Table 4: Respondents' Financial Knowledge

Financial knowledge items	Knowledgeable	Not Knowledgeable	M	SD
Question 1	800 (50.6%)	782 (49.4%)	1.49	.500
Question 2	1485 (93.9%)	97 (6.1%)	1.06	.239
Question 3	864 (54.6%)	718 (45.4%)	1.45	.498
Question 4	357 (22.6%)	1225 (77.4%)	1.77	.418
Question 5	762 (48.2%)	820 (51.8%)	1.51	.499
Question 6	516 (32.6%)	1066 (67.4%)	1.67	.468
Question 7	862 (54.5%)	720 (45.5%)	1.45	.498
Question 8	727 (46.0%)	855 (54.0%)	1.54	.498
Question 9	869 (54.9%)	713 (45.1%)	1.45	.497
Question 10	1238 (78.3%)	344 (21.7%)	1.21	.412
Question 11	759 (48.0%)	823 (52.0%)	1.52	.499
Question 12	1337 (84.5%)	245 (15.5%)	1.15	.361
Question 13	183 (11.6%)	1399 (88.4%	1.88	.319
Question 14	1010 (63.8%)	572 (36.2%)	1.36	.480
Question 15	706 (44.6%)	876 (55.4%)	1.55	.497
Question 16	278 (17.6%)	1304 (82.4%)	1.82	.380
Total scores	1228 (77.6%)	354 (22.4%)	1.22	.416
Highly financially knowledgeable	230 (14.5%)			
Moderately financially knowledgeable	998 (63.1%)			
Less financially knowledgeable	354 (22.4%)			

al., 2018). The findings of this study are similar to those of (Thapa, 2015), who found that college students in Nepal have a moderate level of basic financial knowledge at 62% mean score.

With considerations to savings and investment literacy, the analysis revealed that the majority of the respondents (80.3%) have positive savings and investment literacy compared to 19.7% that do not. Although higher than the findings of existing studies, this is consistent with Amari and Jarboui (2015) and Thapa's (2015) studies which point to positive savings and investment literacy among college students. Furthermore, the analysis revealed that most of the respondents (55.4%) are unable to manage their spending and credit as opposed to the 44.6% that are able to do so. This finding is consistent with those of other studies which indicate negative spending and credit literacy among college students (Thapa, 2015; Lusardi and Tufano, 2015; Brown *et al*., 2016; Chmelíková, 2016).

Again, 54.1% of the respondents exhibited good proficiency in managing their income as compared to 45.9% who displayed poor proficiency. This finding is inconsistent with the existing literature which points to poor income management literacy among college students (Harrison *et al*., 2015; Manju, 2016). With regard to money management literacy, the analysis shows that the majority of the respondents (68.3%) can manage their money as opposed to 31.7% who are unable to do so. This finding is inconsistent with the existing literature which reveals poor income management literacy among college students (Harrison *et al*., 2015; Manju, 2016).

Respondents' Financial Behaviour

As shown in Table **5**, based on the overall analysis conducted on all 10 items of financial behaviour, it was found that most of the respondents (81.3%) have good financial behaviour as opposed to 18.7% that exhibit poor financial behaviour. While some studies have

Table 5: Respondents' Financial Behaviour

Financial Behaviour items	Good Behaviour	Poor Behaviour	M	SD
Question 1	1329 (84.0%)	253 (16.0%)	1.15	.366
Question 2	1302 (82.3%)	280 (17.7%)	1.17	.381
Question 3	1325 (83.8%)	257 (16.2%)	1.16	.368
Question 4	776 (49.1%)	806 (50.9%)	1.50	.500
Question 5	611 (38.6%)	971 (61.4%)	1.61	.487
Question 6	1125 (71.1%)	457 (28.9%)	1.28	.453
Question 7	870 (55.0%)	712 (45.0%)	1.45	.497
Question 8	949 (60.0%)	633 (40.0%)	1.40	.490
Question 9	943 (59.6%)	639 (40.4%)	1.40	.490
Question 10	1168 (73.8%)	414 (26.2%)	1.26	.439
Total scores	1286 (81.3%)	296 (18.7%)	1.18	.390

found that university students have good financial behaviour (Thapa, 2015), others have concluded that they do not (Allgood and Walstad, 2016; Chmelíková, 2016; Harrington *et al*., 2017).

Respondents' Financial Knowledge vs Financial Behaviour

With refernce to Table **6**, the analysis of financial knowledge indicated that of the 229 respondents that are highly financially knowledgeable, most exhibit good financial behaviour, with (n=194; 84.7%). Again, the analysis indicated that most of the respondents (n=813; 81.4%) that have moderate financial knowledge have good financial behaviour. However, the results also indicated that most of the respondents with less financial knowledge have good financial behaviour. This suggests that good financial behaviour is not necessarily an indication of being financially knowledgeable. Some studies agree that there is a positive relationship between financial knowledge and financial behaviour (Shih and Ke, 2014; Angus, 2018; Herawati *et al*., 2018). However, some studies have found otherwise (Mandell and Klein, 2009; Tang and Peter, 2015).

Respondents' Financial Attitudes

The overall analysis conducted on all 13 items of financial attitude as presented in Table **7**, suggested that most of the respondents (n=1513; 95.6%) have a positive financial attitude compared to the (n=69; 4.4%) of the respondents who have a negative financial attitude. While this finding is consistent with some of the literature (Potrich *et al*., 2015; Isomidinova and Singh, 2017; Susan and Djajadikerta, 2017), some studies have asserted that college students and young adults, in general, have a negative financial attitude (Németh *et al*., 2015).

Respondents' Numeracy Skills

Based on the information contained in Table **8**, the overall analysis conducted on all six items that tested numeracy skills among the students, the results suggested that most of the respondents (n=1486, (93.9%) are numerically skilled. On the other hand, (n=96; 6.1%) of the respondents are less numerically skilled. While this finding is consistent with some literature (Gao, 2017; Jayaraman *et al*., 2018), several studies have asserted that college students and young

Table 6: Respondents' Financial Knowledge vs Financial Behavior

FINANCIAL KNOWLEDGE	FINANCIAL BEHAVIOUR	
	Good Behaviour	Poor Behaviour
Highly Financial Knowledgeable	194 (84.7%)	35 (15.3%)
Moderately Financially Knowledgeable	813 (81.4%)	186 (18.6%)
Less Financially Knowledgeable	279 (78.8%)	75 (21.2%)
Total	1286 (81.3%)	296 (18.7%)

Table 7: Respondents' Financial Attitude

Financial Attitude items	Positive Attitude	Negative Attitude	M	SD
Question 1	1518 (96.0%)	64 (4.0%)	1.04	.197
Question 2	1511 (95.5%)	71 (6.1%)	1.04	.207
Question 3	1405 (88.8%)	177 (11.2%)	1.11	.315
Question 4	1224 (77.4%)	358 (22.6%)	1.22	.418
Question 5	1203 (76.0%)	379 (24.0%)	1.23	.426
Question 6	1357 (85.8%)	225 (14.2%)	1.14	.349
Question 7	1440 (91.0%)	142 (9.0%)	1.08	.285
Question 8	1305 (82.5%)	277 (17.5%)	1.17	.380
Question 9	1262 (79.8%)	320 (20.2%)	1.20	.401
Question 10	1396 (88.2%)	186 (11.8%)	1.11	.322
Question 11	1484 (93.8%)	98 (6.2%)	1.06	.241
Question 12	1304 (82.4%)	278 (17.6%)	1.17	.380
Question 13	1406 (88.9%)	176 (11.1%)	1.11	.314
Total scores	1513 (95.6%)	69 (4.4%)	1.04	.204

adults, in general, have low levels of numeracy skills (Almenberg and Widmark, 2011; Fornero and Monticone, 2011; Lusardi and Wallace, 2013; French and McKillop, 2016). The results in this study contradict the majority of the literature reviewed and thus offer a different perspective on numeracy skills. When this study was undertaken, we anticipated that accounting students would have better numeracy skills, but we did not anticipate such a high level of numeracy.

Intra-Component Drivers of Financial Capability

The findings of this study suggest that three main factors influence accounting students' financial capability, namely, *Financial Attitude; Financial Behavior;* and *Numeracy Skills.* All these factors are significantly influential, with a p-value of < 0.05 as depicted in Figure **1**.

While some studies have shown that not all components of financial capability necessarily drive financial capability (Sherraden and Grinstein-Weiss, 2015; Xiao and O'Neill, 2016; Xiao and Porto, 2017; Drever *et al*., 2015), others have reported otherwise (Tang *et al*., 2015). The findings of this study are consistent with other studies that suggest a relationship between financial attitude, financial behaviour, numeracy skills and financial capability (Allgood and Walstad, 2016; Strömbäck *et al*., 2017). While some studies have established a link between financial knowledge and financial capability (Brown *et al*., 2014; Drever *et al*., 2015; Xiao and O'Neill, 2016; Xiao and Porto, 2017), this is not consistent with this study. The current study's finding that there is no link between financial knowledge and financial capability in the financial decision is supported by recent studies (Tang *et al*., 2015; Friedline and West, 2016).

Table 8: Respondents' Numerical Skills

Financial knowledge items	Numerically skilled	Less numerically skilled	M	SD
Question 1	1488 (94.1%)	94 (5.9%)	1.05	.236
Question 2	1446 (91.4%)	136 (8.6%)	1.08	.280
Question 3	1434 (90.6%)	148 (9.4%)	1.09	.291
Question 4	472 (29.8%)	1110 (70.2%)	1.70	.457
Question 5	1468 (92.8%)	114 (7.2%)	1.07	.258
Question 6	990 (62.6%)	592 (37.4%)	1.37	.484
Total scores	1486 (93.9%)	96 (6.1%)	1.06	.238

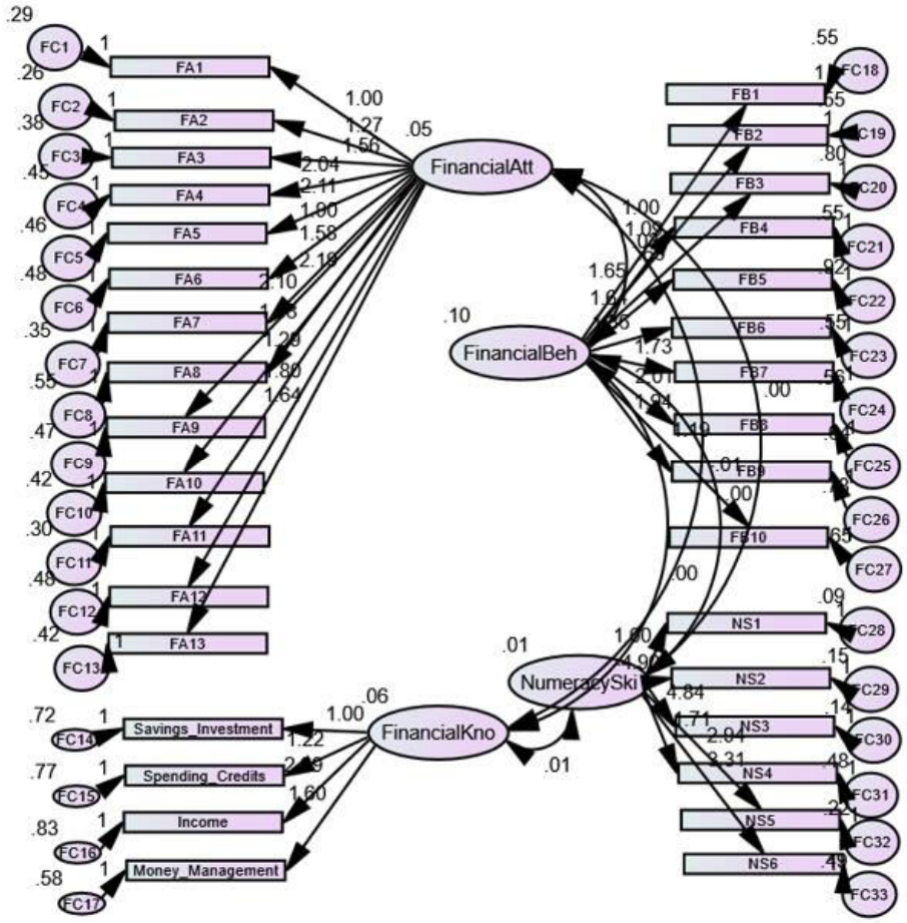

Figure 1: CFA path diagram (Financial Capability).

Socio-Demographic factors vs Financial capability.

Table 9: Regression Model of Financial Capability

Coefficients							
Model	**Unstandardised Coefficients**		**Standardised Coefficient Beta**	**T**	**Sig.**	**95,0% Confidence interval for B**	
	B	**Std. Error**				**Lower Bound**	**Upper Bound**
(Constant)	4.348	.096		45.336	.000	4.160	4.536
Campus	.016	.030	.018	.018	.583	-.042	.075
Level of Study	-.161	.034	-.209	-4.720	.000*	-.229	-.094
Year of Study	.200	.038	.226	5.231	.000*	.125	.275
Current Qualification	.028	.010	.087	2.766	.006*	.008	.048
Racial group	-.057	.022	-.067	-2.543	.011*	-.101	-.013
Parents' Educational level	.010	.020	.012	.499	.618	-.029	0.50
Pattern of savings	.034	.019	.045	1.813	.070	-.003	.071

Dependent Variable: Financial Capability.
*=p<0.05.

Table 10: Bivariate Regression Model of Financial Capability

Coefficients							
Model	**Unstandardised Coefficients**		**Standardised Coefficient Beta**	**T**	**Sig.**	**95,0% Confidence interval for B**	
	B	**Std. Error**				**Lower Bound**	**Upper Bound**
(Constant)	1.034	.027		38.922	.000	.982	1.086
Level of Study	-.069	.017	-.172	-3.996	.000	-.103	-.035
Current Qualification	.013	.004	.079	3.150	.002	.005	.021
Year of Study	.083	.020	.180	4.155	.000	.044	.122

Dependent Variable: Financial Capability.

Gender

Based on the results of the regression model in Table **9**, *Gender* is not statistically significant in determining accounting students' financial capability. This finding is consistent with some existing studies (Thapa, 2015). However, other studies have found that there is a positive relationship between gender and financial capabilities (De Clercq and Venter, 2009; Oseifuah and Gyekye, 2014; Agnew and Harrison, 2015). Whilst several studies have concluded that male students are more financially capable than female students (Oseifuah and Gyekye, 2014; Montford and Goldsmith, 2016; Bucher-Koenen *et al*., 2017; Chen and Garand, 2018), a few have asserted that female students are better equipped to make financial decisions than male students (Shaari *et al*., 2013; Fatoki, 2014).

Age

Based on the results from the regression model in Table **9**, *Age* is not statistically significant in determining accounting students' financial capability. Except for studies like Özdemir *et al*. (2015), most studies have found a positive relationship between college students' age and their financial capability (De Clercq and Venter, 2009; Xiao *et al*., 2015).

Education

Based on the results of the regression model in Tables **9** and **10**, *Education* is statistically significant in determining accounting students' financial capability. For the purposes of this study, education comprised of students' level of study, year of study and current qualification. A breakdown of the students' financial capability and their institutions is further presented in Table **11**.

This finding is consistent with some studies (Shahrabani, 2013; Fatoki, 2014; Albeerdy and Gharleghi, 2015b), but contradicts those of others that did not establish a relationship between education and financial capabilities (Ansong and Gyensare, 2012; Botha, 2013; Chmelíková, 2016; Motsepe, 2016).

Income

Based on the results from the regression model in Table **9**, *Income* is not statistically significant in determining accounting students' financial capability. This finding is inconsistent with some studies (De Clercq and Venter, 2009; Ansong and Gyensare, 2012; de Bassa Scheresberg, 2013; Thapa, 2015).

Race

Based on the results from the regression model in Table **9**, *Race* is statistically significant in determining accounting students' financial capability. This finding is consistent with existing studies which have reported that race influences financial capabilities (De Clercq and Venter, 2009; Shahrabani, 2013; Agnew and Harrison, 2015; Serido *et al*., 2016). However, some studies did not find a significant relationship between

Table 11: Respondents' Financial Capability (FC) Versus Institutions

Institutions	**Financial Capability (FC)**			
	High FC	**Moderate FC**	**Low FC**	**Total**
UKZN	794 (91.9%)	54 (6.3%)	16 (1.9%)	864
DUT	388 (83.7%)	56 (13.9%)	10 (2.5%)	404
MUT	284 (90.4%)	26 (8.3%)	4 (1.3%)	314
Total	1416 (89.5%)	136 (4.8%)	30 (1.9%)	1582

race and financial capabilities (Volpe *et al*., 1996; Chen and Volpe, 1998; Botha, 2013).

Parents' Income

Based on the results from the regression model in Table **9**, *Parents' income* is not statistically significant in determining accounting students' financial capability. This finding is consistent with some studies (Mandell and Klein, 2007; Jorgensen and Savla, 2010). However, other studies have found that there is a positive relationship between parents' income and financial capability (Botha, 2013; Herawati *et al*., 2018; Zhu, 2018).

Parents' Education

Based on the results from the regression model in Table **9**, *Parents' education* is not statistically significant in determining accounting students' financial capability. This finding is consistent with some studies (Albeerdy and Gharleghi, 2015b). However, other studies have found that there is a positive relationship between parents' education and financial capability (Ansong and Gyensare, 2012; Angulo-Ruiz and Pergelova, 2015; Németh *et al*., 2015; Tang and Peter, 2015).

Level of Study vs Financial Capability

As presented in Tables **9** and **10**, the analysis suggested that most of the respondents from each class have the high financial capability. The majority of the 180 respondents from first-year non-accounting specialisation have the high financial capability, with (n = 151; 83.9%). Similarly, most of the 579 respondents from first-year mainstream have the high financial capability, with (n =528; 91.2%). Moreover, the majority of the 470 respondents in their second year of study have the high financial capability, with (n = 428; 91.1%) as do most of the 353 respondents in their third year of study, with (n=309; 87.5%). Hence, there is a statistically significant relationship between the predicting variables (level of study, current qualification, and year of study) and the outcome variable (financial capability) – the level of study, current qualification, and year of study were used to predict financial capability among accounting students. These findings are inconsistent with related studies on the financial literacy of students (Ansong and Gyensare, 2012; Botha, 2013; Chmelíková, 2016; Motsepe, 2016). However, they are consistent with the findings of other studies (Shahrabani, 2013; Fatoki, 2014; Albeerdy and Gharleghi, 2015b).

The findings of this study as discussed is this section, highlights significant evidences on the financial capability of South African students in comparison with existing literatures globally.

5. CONCLUSION

The study found that accounting students within KwaZulu-Natal are highly financially capable with a percentage of financial capability mean score of 89.5%. The results from cross-tabulations between the students' universities and their financial capability, further highlight that students from UKZN are the most financially capable with 91.9% of the total sample being highly financially capable. This was followed by students from MUT (90.4%), then DUT (83.7%). An analysis of the intra-component drivers of financial capability suggests that three main factors influence accounting students' financial capability, namely, *Financial Attitude; Financial Behavior;* and *Numeracy Skills.* All these factors are significantly influential, with a p-value of <0.05. It has been said that financial capability can improve both financial decisions making as well as access to suitable financial products and services, which are the two defining elements of financial inclusion. This view is in consonance with the combined capability approach, which posits that both internal capacity and external conditions are necessary to affect the capability of individuals. This study provides insight into the understanding of the financial capability of students and young adults in KwaZulu-Natal, South Africa. The provided empirical evidence is relevant in better understanding the financial decision-making capabilities of this group as well as factors that crucial to the improvement of their financial capabilities.

APPENDIX A - FINANCIAL CAPABILITY OF ACCOUNTING STUDENTS IN SOUTH AFRICAN UNIVERSITIES

Financial Knowledge – Questions (Read in Conjuction with Table 4)

Question 1 – Income question

Question 2 – Savings and Investment question

Question 3 - Savings and Investment question

Question 4 – Spending and Credit question

Question 5 – Income question

Question 6 - Savings and Investment question

Question 6 - Spending and Credit question

Question 7 - Savings and Investment question

Question 8 – Money management question

Question 9 – Money management question

Question 10 – Income question

Question 11 – Savings and Investment question

Question 12 – Money management question

Question 13 – Income question

Question 14 – Income question

Question 15 – Spending and Credit question

Question 16 – Spending and Credit question

Financial Behaviour – Questions (Read in Conjuction with Table 5)

Question 1 – Financial organization question

Question 2 – Financial discipline question

Question 3 - Financial organization question

Question 4 - Financial organization question

Question 5 - Financial organization question

Question 6 - Financial discipline question

Question 7 - Financial discipline question

Question 8 - Financial discipline question

Question 9 – Financial risk question

Question 10 – Finanacial risk question

Financial Attitudes – Questions (Read in Conjuction with Table 7)

Question 1 – Financial responsibility question

Question 2 – Financial descipline question

Question 3 – Financial Motivation and control question

Question 4 - Financial responsibility question

Question 5 - Financial responsibility question

Question 6 - Financial responsibility question

Question 7 - Financial descipline question

Question 8 - Financial Motivation and control question

Question 9 - Financial responsibility question

Question 10 - Financial Motivation and control question

Question 11 - Financial Descipline question

Question 12 - Financial Motivation and control

Question 13 - Financial Motivation and control

Numeracy Skills – Questions (Read in Conjuction with Table 8)

Question 1 – Subtraction question

Question 2 – Multiplication question

Question 3 – Propability question

Question 4 – Fraction question

Question 5 - Division question

Question 6 – Compound Interest question

NB: This appendix explains better the type of questions that were used during data collection.

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