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Exploring the influence of students' Grade 12 Accounting knowledge on their academic success in a B. Com Accounting degree at a university in the Western Cape

by

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A full dissertation submitted in fulfilment of the requirements for the degree of

MASTER OF COMMERCE IN ACCOUNTING

In the Faculty of Economic and Management Sciences at the University of the Western Cape

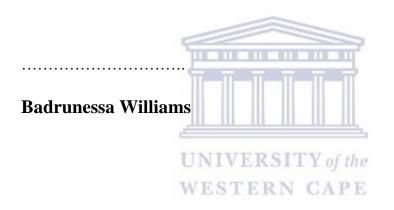
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August 2022

DECLARATION

I declare that Exploring the influence of students' Grade 12 Accounting knowledge on their academic success in a B. Com Accounting degree at a university in the Western Cape is my own work, that it has not been submitted before for any degree or examination to any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.



August 2022

KEYWORDS

South Africa

Accounting education

Student success

Student attrition

Throughput rate

Further Education and Training Band

Extended curriculum programme

Mainstream degree programme



ABSTRACT

Studies conducted nationally found that students with Matric Accounting knowledge performed significantly better than students without it in university-level Accounting modules (Baard, Steenkamp and Kidd 2010; Papageorgiou 2017; Steenkamp, Baard and Frick 2009). However, the reality at South African universities is that Accounting as a school subject is not always a requirement to pursue BCom Accounting studies. This situation means that at certain universities, Accounting as a school subject is not taken into consideration for this degree, while this is the case at some universities.

While this study's main research question focuses on the influence of Accounting as a school subject on students' academic success in a BCom Accounting degree, this study also focused on other factors, such as school Mathematics, language barriers, overall academic performance, school-level Accounting curriculum in the Further Education and Training (FET) phase and how overall previous academic performance influences students' success.

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This study focuses on four cohorts of students enrolled for the mainstream programme in 2017-2019 and the extended curriculum programme in 2016-2019 at a South African university. The reason for focusing on these four cohorts was to establish the throughput rate of students with or without Matric Accounting knowledge, as well as the impact of other factors such as Matric English and Mathematics, gender and race on students' academic performance in a BCom Accounting degree. Three most significant findings of this study are that firstly, mainstream students who obtained at least 70% for Matric Accounting completed the degree within the minimum three-year time frame, while students who obtained at least 80% had a higher throughput rate of 47.1%; the corresponding rates are lower at 34.4% for those with Matric Accounting 70-79% but a shocking 0% for those with less than 70% in Matric Accounting. For extended curriculum programme students the results showed that the higher the Matric Accounting

mark, the higher the likelihood of graduating within minimum time. Secondly, mainstream students who achieved lower than 70% for Mathematics and did not complete Matric Accounting were unable to complete the degree in the minimum timeframe. Finally, mainstream students who completed Matric Accounting had a significantly higher throughput rate than mainstream students without Matric Accounting. On the other hand, the throughput rates for extended curriculum programme students with and without Matric Accounting were almost identical.

The research methodology includes both quantitative and qualitative methods. The results can inform the selection and admission criteria at tertiary institutions and inform other stakeholders in higher education on how school subjects and grades influence students' throughput rate.

Keywords: accounting education, student success, student attrition, throughput

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rate

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DEDICATION

This dissertation is dedicated to my parents, Ridwaan and Aneequah, and my two sisters, Suraya and Saadikah. Thank you for your love and support.



LIST OF ACRONYMS/ABBREVIATIONS

B. Com Bachelor of Commerce

CAPS Curriculum and Assessment Policy Statement

DBE Department of Basic Education

DHET Department of Higher Education and Training

ECP Extended Curriculum Programme

EMS Economic and Management Sciences

FET Further Education and Training

HE Higher education

HEI Higher education institution

HL Home language

NBT National Benchmark Tests

NSC National Senior Certificate

SA South Africa IVERSITY of the

SAICA South African Institute of Chartered Accountants

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DEFINITION OF KEY CONCEPTS USED

For clarity and to provide a better understanding, the key concepts used in this dissertation are defined and described below. These are the definitions and understandings that are upheld in the different chapters.

Academic achievement: Represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college and university (Oxford Bibliographies, 2020). In this study, academic achievement and/or performance is the extent to which a student has achieved their short- or long-term educational goals in their B. Com Accounting undergraduate degree.

Accounting: Accounting focuses on measuring performance, and processing and communicating financial information about economic sectors, as detailed in the CAPS curriculum (Department of Basic Education, 2011).

Assessment: Refers to the wide variety of methods or tools that educators use to evaluate, measure and document the academic readiness, learning progress, skill acquisition, or educational needs of learners/students (The Glossary of Education Reform, 2015).

Adequate rating: Refers to the code and percentage set by the Department of Basic Education for a learner to pass their Grade 12 National Senior Certificate with a bachelor's pass. It means that a learner should pass at least four of his/her six/seven subjects with a rating of 4, which is a final mark of 50% and above (Department of Basic Education, 2011).

Bachelor's pass: As described in the previous concept of adequate rating, it means that learners have passed at least four of their subjects with an adequate rating of 50% and above. A bachelor's pass is the minimum entrance requirement for admission into a degree programme at universities in South Africa (Stellenbosch University, 2018).

CAPS: The Curriculum and Assessment Policy Statement (CAPS), which was an amendment to the National Curriculum Statement (NCS) for Grades R-12

(Department of Basic Education, 2011). There is one single comprehensive national CAPS for each subject (Du Plessis & Mbunyuza, 2014).

Codes: Seven levels of competence at the end of each school year have been described for each subject listed for Grades R-12 (Department of Basic Education, 2011). The various achievement levels and their corresponding percentage bands are shown in the table below:

Table 1: Codes and percentages for recording and reporting

Rating code	Description of competence	Percentage
7	Outstanding achievement	80 - 100
6	Meritorious achievement	70 - 79
5	Substantial achievement	60 - 69
4	Adequate achievement	50 - 59
3	Moderate achievement	40 - 49
2	Elementary achievement	30 - 39
1	Not achieved	0 - 29

(Department of Basic Education, 2011:46).

Cohort: A group whose members share a significant experience at a certain period or have one or more similar characteristics (Business Dictionary, 2020). The study will be conducted with four cohorts of students. The first cohort will be students who registered for mainstream B. Com Accounting and did Accounting as a school subject and the second cohort is also mainstream but did not do Accounting as a school subject. These two cohorts' academic performance will be tracked from 2017 until 2019 which is their final year of study. The third cohort of students is registered for B. Com Accounting four year degree (Extended Curriculum Programme) and did Accounting as a school subject and the fourth cohort is also registered for this degree but did not study Accounting at school. The third and fourth cohorts' academic performance will be tracked from 2016 - 2019.

Dropout: Previously enrolled students who do not re-enrol or do not complete their intended degree programme or set of courses (Noel-Levitz, 2008).

Epistemological access: Epistemological access refers to a student's capacity to access new knowledge based on prior learning, or preparedness (the key to epistemic access), that the student needs in order to engage with the concepts, practices and ways of thinking of a discipline at post-school level (Morrow, 1994, 2009).

Further Education and Training (FET) phase: Grade 10 up to and including Grade 12, comprising further academic schooling as well as intermediate vocational education at technical colleges, community colleges and private colleges (Nuffic, 2015).

Language barrier: The absence [difficulty] of communication between people who speak different languages (Collins Dictionary, 2021). In this study, a language barrier means that learners are learning in a second or additional language and not in their home language, which makes it difficult for them to express themselves clearly and logically in verbal and written communication.

Learner: Someone who is learning about a particular subject or how to do something (Collins Dictionary, 2021). In this study, a learner refers to children who are at school, from Grade R to Grade 12.

National Senior Certificate (NSC): Learners take examinations for the NSC after completing Grade 12 and it generally indicates that a candidate meets the requirements for admission to higher education. Within the South African National Qualifications Framework (NQF) structure, the NSC is on level 4 and bears 130 credits (representative of 1 300 notional learning hours) (Nuffic, 2015).

Post-school studies: The post-school system consists of the following, which falls under the purview of the Department of Higher Education and Training (DHET): public HEIs (universities); colleges; private colleges; and private HEIs (Data Dictionary of Post-School Education and Training, 2019). In this study, it refers to any higher education institution that a learner could be admitted to after the completion of Grade 12.

Sample: A group of students who are taken from a larger group and studied, tested, or questioned to get information (Merriam-Webster, 2021). In this study, the sample refers to the students who were part of the focus group interviews.

School: A formal institution for educating children (Oxford Bibliographies, 2020). In this study, a school refers to a public school that enrolls learners from Grade R (reception) to Grade 12.

School-based assessments (**SBA**): A continuous planned process of identifying, gathering and interpreting information about the performance of a learner, using various forms of evaluation (Best Education Solutions, 2019).

Student: A person studying at a university or college (Collins Dictionary, 2021). In this study, a student refers to a person who enrolls at a higher education institution.

Subject content knowledge: Pertains to a teacher's "depth and breadth of understanding and conceptualising of his or her certification area" (Lederman & Gess-Newsome, 1992:16). In this study, subject content knowledge and skills refer to the CAPS curricula of Accounting and the extent to which the learners acquired these in Grades 10 - 12.

University readiness: Can be defined "operationally as the level of preparation a student needs in order to enroll and succeed – without remediation – in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate programme" (Conley, 2007:5).

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND AND EDUCATIONAL CONTEXT TO THE STUDY

Studies conducted nationally found that students with Grade 12 Accounting knowledge performed significantly better than students without Grade 12 Accounting knowledge in the introductory Accounting modules (Steenkamp, Baard & Frick, 2009; Baard, Steenkamp & Kidd, 2010; Papageorgiou, 2017). A recent study conducted in South Africa found that there was a correlation between a high mark achieved in Accounting at school and the mark achieved in Accounting 1 (Papageorgiou, 2017), while an Australian study confirmed that Accounting as a school subject is beneficial for studying, in particular, first-year tertiary Accounting. The Australian study highlighted that studying Accounting at school appears to be specific only to studying the Accounting module at the tertiary level. In addition to this, the study found that the curriculum of the Accounting done at school is aligned with the curriculum of the introductory Accounting module at the tertiary level. Hence, the correlation was expected (Alcock, Cockcroft & Finn, 2008). A prior international study conducted also concurs that prior high school Accounting knowledge influences students' academic performance in Accounting modules (Rankin, Silvester, Vallely & Wyatt, 2003).

An interesting finding of a study conducted in South Africa revealed that academics perceived the lack of prior school Accounting knowledge as a hindrance for students completing an Accounting module in the first year (Steenkamp et al., 2009). On the contrary, first-year Accounting students in the current study did not believe that prior Accounting knowledge played a significant role in their success. The statistical data of the study concurs with the academics' belief and showed that high school Accounting contributes to the success in the

tertiary Accounting module. While there is a positive influence on students who did Accounting at school's performance, Xiang and Gruber (2012) note that there is no linear relationship and other factors such as motivation and attitudes towards learning Accounting also play an important role in the students' success.

Contrarily, Byrne and Flood (2008) strongly argue against the perception that prior Accounting knowledge has a significant influence on students' performance in Financial and Management Accounting modules. The authors did not find a correlation between prior Accounting knowledge and students' performance in Accounting modules. Hence, students without prior Accounting knowledge will not be disadvantaged. Byrne and Flood (2008) conclude that prior academic achievement is the most significant variable which influenced first-year Accounting Irish students' academic performance. They further note that this finding could have serious implications for the admission policies of universities, particularly, Accounting programmes.

Xiang and Gruber (2012) postulate that the benefit of high school Accounting is only beneficial at first year level, however, this benefit diminishes in subsequent year levels. This finding was confirmed by a South African study that found that there was no correlation between the grade achieved in high school Accounting and the third year Accounting module (Jansen & de Villiers, 2016). These authors, who focused on determinants of success in a third-year Accounting module, also found that the previous year level of academic performance in the Accounting module plays a significant role in the performance in the next level. While this study's main research question focuses on the influence of Accounting as a school subject on students' academic success in a B.Com Accounting degree, the study will also focus on other factors, such as, school Mathematics, language barrier, overall academic performance and the context of the Accounting school curriculum in the Further Education and Training (FET) phase and the overall previous academic performance. The review of literature of these factors will now be presented.

Several studies indicated that school Mathematics plays a significant role in the success in passing Accounting and quantitative modules. Wong and Chia (1996)

showed that students who achieved a higher grade in Mathematics were associated with a higher level of performance in a financial Accounting course. They provided empirical evidence that there is a strong correlation between degree of proficiency in Mathematics and English Language on the students' performance in an Accounting course. A study conducted more than a decade later confirms the finding that students who studied Mathematics at high school achieved higher grades in introductory business courses, except for the Cost Accounting module (Alcock et al., 2008). On the contrary, a South African study found that there was no significant relationship between high school Mathematics and a third year Accounting module (Jansen & de Villiers, 2016).

South Africa is one of the few countries in the world which have many official languages. The country's national language policy has implications for overall student success at school and at universities as revealed in literature. A recent study found a strong correlation between students who are English first language, English first additional language and Afrikaans first additional language speakers with Accounting 1 performance (Papageorgiou, 2017). Poor proficiency in the English language could result in students' inability to decode Accounting concepts that are not part of their daily vocabulary, which could lead to challenges in applying knowledge to solve problems (Koch & Kriel, 2005).

Addow, Abubakar and Abukar (2013) provide statistical data that demonstrates that there is a statistically significant relationship between English language proficiency and academic achievement of final year Somalian students. This finding indicates that the relationship between English language proficiency and academic achievement is weak. Which further suggests that as English proficiency increases, the academic achievement will not necessarily increase. Contrary to the previous study mentioned, a study conducted in Pakistan showed that English proficiency was significantly correlated to graduates' academic achievement (ud Din & Saeed, 2018). Olanipekun, Garuba, Mohammed and Ohiemi (2014) concur that English proficiency is essential to third year vocational education undergraduate students' performance.

In the South African context, learners who are taught in their home language which is the official medium of instruction, namely English and Afrikaans, scored higher marks in Mathematics as indicated in a study by Howie (2003). Therefore, learners whose home language is neither English nor Afrikaans were most likely to achieve a lower grade in Mathematics. Similar to the findings of Howie (2003), a South African study found that Mathematics tuition in the first year calculus students' home language showed a better academic achievement than in students whose home language was not the language of instruction (Gerber, Engelbrecht & Harding, 2005). A study conducted in both South Africa and Tanzania corroborate these findings and showed English proficiency is a core factor influencing students' academic success (Brock-Utne, 2007). Wong and Chia (1996) recommend that universities should consider other means of assessing students' proficiency in the English language in order to enhance their academic performance. Their results showed evidence to support the relationship between degree of proficiency in Mathematics and English Language in relation to the students' performance in a first year Accounting course.

Overall academic performance indicators can be predicted according to the results achieved in the National Senior Certificate (Grade 12) (Baard et al., 2010; Jansen & de Villiers, 2016; Papageorgiou, 2017). In a recent study, findings revealed that Matric average results above 65% is a useful indicator to predict academic success at university (van Rooy & Coetzee-van Rooy, 2015), while Matric average results below 65% cannot be used as a guarantee to predict student success. Grades achieved for languages are not strong predictors of students' academic success at university. Their study's findings do not correlate with the empirical evidence of other South African studies (Howe, 2003; Gerber et al., 2005; Brock – Utne, 2007).

There have been several changes made by the Department of Basic Education to the overall curriculum which had an impact on the delivery of quality education for all students (du Plessis & Mbunyuza, 2014). The new curriculum and assessment policy statement (CAPS) was implemented as follows: Grade 10 only in 2012, Grade 10 and 11 in 2013 and the entire FET phase in 2014 (Rajoo, 2012).

The CAPS curriculum is a modification of the previous curriculum statement, the National Curriculum Statement and offers detailed and clear assistance regarding the subject specific content and assessment (Venter, 2016).

A study conducted to evaluate the implementation of CAPS found that the Department of Basic Education implemented the curriculum hastily without proper training to educators and schools (du Plessis & Mbunyuza, 2014). Whilst the previous authors showed that there was a lack of support from the Department of Basic Education, Rajoo (2012) showed that there was also a lack of leadership and guidance from the school management, especially with the implementation of the new CAPS curriculum. Rajoo (2012) found both learners and teachers highlighted learners' lack of Accounting knowledge and skills when they were in Grade 10. This deficit in knowledge and skills were caused by the neglect Accounting suffers during the Grade 8 and 9 years. The author infers that this deficit was also reflected in the matriculation results and thus concludes that this is due to ill-equipped teachers who lack the necessary knowledge and skills to deliver the curriculum successfully.

Current research revealed that the CAPS Accounting curriculum does not adequately prepare students for the B. Com Accounting degree. According to van Romburgh (2014), a group of first year Accounting students confirmed that the school Accounting curriculum did not adequately prepare them for University Accounting courses. The questionnaires given to university lecturers showed that academics felt that there is not enough focus on the basic Accounting principles and that there are topics which can be omitted from the current curriculum, which would give teachers more time to prepare students for tertiary studies. Ngwenya and Hall (2014) also encourage the omission of certain topics from the CAPS curriculum in order to create time for educators to teach the basic Accounting principles in depth. These researchers conducted a comparative study of the National Curriculum Statement (NCS) and CAPS for the Accounting FET phase and found that NCS fortified a learner – centred and activity based approach to education while CAPS gives guidance for assessment, which has multiple implications for teaching strategies. Therefore, these researchers recommend that

policy provides a more plain and overt guidance on the pedagogical methods which will encourage active, conceptual and critical thinking and avoid rote learning. Tinto's Student Integration Model (Tinto 1975; 1993) was chosen as the overarching framework for this study due to its particular theoretical underpinning and the significant volume of work explicating his theory. His model is mainly used by researchers to develop, collect and analyse empirical evidence in studies focusing on matters such as student persistence, attrition, academic performance, success, and engagement. Tinto's model has also been implemented in different settings ranging from multiple institutions to individual programmes and subjects. Tinto's model has largely contributed to understanding of student persistence and drop-out rates.

According to Tinto's model, students enter university with various individual characteristics, such as: family; parental educational level; socio-economic status; age, sex, race, ability) and previous schooling experience. All of these characteristics play a direct part in student departure, i.e., a student's decision to either stay on or drop out of university. This study is framed by Tinto's (1975) hypothesises that students' entry characteristics significantly effects their initial commitment to the institution and their aim to graduate. This suggests that the students' initial commitment to an institution and aim to graduate and therefore influences the student's degree of integration into the social and academic domains of the institution.

The reality at South African universities is that the admission requirements for the B. Com Accounting degree at South African universities differ. At certain universities, Accounting as a school subject is not taken into consideration for this degree, while this is the case at some universities. There is a dearth of research that shows if students who studied Accounting at the school level, have an added advantage in completing this degree successfully. It is therefore against this backdrop that this study will explore the influence of Grade 12 Accounting knowledge on students' academic success in a B. Com Accounting degree at a university in the Western Cape. The study will consider how Accounting as a

subject contributes to the successful completion of a B. Com Accounting degree. This study will also seek to understand whether Accounting completed at Grade 12 is related to better or improved academic performance (Rowbottom, 2013). If Accounting is not found to relate to better or improved academic performance, this study will also explore other factors that make a difference in academic performance between those students with or without previous Accounting knowledge.

This study will focus on a cohort of students enrolled for the mainstream programme from 2017 to 2019 and students who enrolled for the extended curriculum programme from 2016 to 2019. The reason for focusing on these two cohorts is to establish the success rate of students with or without Grade 12 Accounting knowledge.

1.2 PROBLEM STATEMENT

As alluded to earlier in the study, the university where the study was conducted had two types of admission requirements for the B. Com Accounting degree. It must be noted that Accounting as a school subject is not necessarily an admission requirement at most traditional universities in South Africa. The literature reviewed shows mixed results regarding the relationship between Grade 12 Accounting and students' academic performance at the tertiary level (Xiang & Gruber, 2012; Rowbottom, 2013; Jansen & de Villiers, 2016, Papageorgiou, 2017). Most of the students registered at the university where the study was conducted are from previously disadvantaged communities. It is therefore imperative to understand if Accounting as an admission requirement gives the students an added advantage to complete the B. Com Accounting degree successfully. However, if this is not the case, the university should reconsider their admission requirements to ensure that students registering for this degree complete it successfully in the minimum timeframe.

1.3 AIM AND OBJECTIVES OF THE STUDY

The study aims to determine the relationship between students' Grade 12 Accounting knowledge and their academic success in the B. Com Accounting

degree at a university in the Western Cape. The objectives of the study are:

- 1. To determine if there is a difference in overall academic performance between students with Grade 12 Accounting knowledge and those students without Grade 12 Accounting knowledge.
- 2. To determine whether factors such as prior Mathematics knowledge, prior overall academic performance, and the language barrier have a relationship with students' overall academic performance.

1.4 RESEARCH QUESTIONS

Given the context described above, the main research question of this study is:

Are students with previous Grade 12 Accounting knowledge more successful in the completion of the B. Com Accounting degree than students without previous Grade 12 Accounting knowledge?

Two sub-questions guided the data collection and analysis process, namely:

- What other school subjects influence students' successful completion of a B. Com Accounting degree?
- What overall academic predictors influence the successful completion of a B. Com Accounting degree?

1.5 FOCUS OF THE STUDY

This study is about the influence of students' Grade 12 Accounting knowledge on their academic success in a B. Com Accounting degree at a university in the Western Cape. The aim of the study is to determine the relationship between students' Grade 12 Accounting knowledge and their academic success in the B. Com Accounting degree at a university in the Western Cape. There were two objectives. The first objective was to determine if there is a difference in the overall academic performance between students with Grade 12 Accounting knowledge and those students without Grade 12 Accounting knowledge. The last objective was to determine whether certain factors such as prior Mathematics

knowledge, prior overall academic performance, and the language barrier has a relationship with students' overall academic performance. Thus, the study is about the factors which influence students' academic success in a B. Com Accounting degree.

The literature reviewed and discussed in Chapter 2 provides the context of the South African school education system, specifically, the review references teachers' lack of Accounting and pedagogical content knowledge. Also, student's Grade 12 academic performance in the National Senior examination is reviewed, with specific focus on Accounting and Mathematics subjects. Then, students' university readiness and the Extended Curriculum Programme implemented at universities are examined. Furthermore, literature on the influence of Grade 12 Accounting, Mathematics, English and overall Grade 12 marks are reviewed. Lastly, the study's theoretical framework, which is based on the review of Tinto's (1975, 1993, 2017) student retention model and self-determination theory of Deci and Ryan (2017, 2020) is discussed.

This study focuses on four cohorts of students enrolled for the B. Com Accounting degree. The first two cohorts of students, one cohort with Matric Accounting and one without, were enrolled for the mainstream programme from 2017 to 2019. The last two cohorts of students were enrolled for the extended curriculum programme from 2016 to 2019 at a South African university. The reason for focusing on these four cohorts was to establish the throughput rate of students with or without Matric Accounting knowledge.

As previously mentioned in the problem statement in Section 1.2, most of the students registered at the university where the study was conducted are from previously disadvantaged communities. It is therefore imperative to understand if Grade 12 Accounting as an admission requirement gives the students an added advantage to complete the B. Com Accounting degree successfully. However, if this is not the case, the university should reconsider their admission requirements

to ensure that students registering for this degree complete it successfully in the minimum timeframe.

1.6 SIGNIFICANCE OF THE STUDY

Studies conducted nationally found that students with Matric Accounting knowledge performed significantly better than students without it in first year university-level Accounting modules (Baard et al., 2010; Papageorgiou, 2017; Steenkamp et al., 2009). There is a dearth of research which studies the impact of Grade 12 Accounting on the students' academic success in their entire undergraduate B. Com Accounting degree. This research will fill that void.

Furthermore, the reality at South African universities is that Accounting as a school subject is not always a requirement to do a B. Com Accounting degree. This situation means that at certain universities, Accounting as a school subject is not taken into consideration for this degree, while this is the case at some universities. It can be deduced that some Universities view Accounting as an important and integral factor to students' academic success in a B. Com Accounting degree, whilst other do not. Hence, it is important to investigate whether Grade 12 Accounting influences students' academic performance in their undergraduate B. Com Accounting degree.

Whilst Grade 12 Accounting is a not a consistent feature in every South African university's admission requirements Grade 12 Mathematics, Grade 12 English and overall Grade 12 marks are. Thus, the study will determine whether Grade 12 Mathematics, Grade 12 English and Grade 12 overall marks influence students' academic success in their B. Com Accounting degree.

Lastly, this research study included final year B. Com Accounting students' perspectives on the research questions. Focus group interviews were conducted to determine whether students believe that Grade 12 subjects, such as Accounting, Mathematics, English had an impact on their academic success in their B. Com Accounting degree. There is a dearth of research of this kind, especially at a

Historically Disadvantaged Institution, and the study will hopefully contribute to the existing body of knowledge.

1.7 OVERVIEW OF RESEARCH METHODOLOGY

1.7.1 Research design

This study uses pragmatism as a paradigm. Kuhn (1962) described a paradigm as a belief system that allowed a community of researchers to agree on both the most important questions in their field and the most appropriate ways to answer those questions. The pragmatism paradigm utilises a mixed-methods approach, to strengthen a weakness in a study (Johnson & Onwuegbuzie, 2004), and also where researchers use both quantitative and qualitative research methods to understand and solve the problem statement (Rahi, 2017). The use of mixed methods is to enlighten and complement each other by addressing different facets of the study (Feilzer, 2010).

Mixed methods were used in this study and involve the collection and integration of both quantitative and qualitative data in a study (Cresswell, 2014). The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone (Cresswell, 2014).

The quantitative method that was employed to conduct this research included descriptive statistics. The purpose of employing quantitative methods is to provide a proposed explanation for the relationship among variables being tested (Cresswell, 2014). For the qualitative method, focus group interviews were used. The purpose of conducting the focus group interviews is to elicit the participants' opinions and views and learn the meaning of the problem from the perspective of the participants. (Cresswell, 2014).

1.7.2 Research sites and participants

The study was conducted with four cohorts of students. The first cohort were students who registered for mainstream B. Com Accounting and did Accounting as a school subject and the second cohort was also mainstream but did not do

Accounting as a school subject. These two cohorts' academic performance was tracked from 2017 until 2019 which was their final year of study. The third cohort of students was registered for the B. Com Accounting four year degree (Extended Curriculum Programme) and did Accounting as a school subject. The fourth cohort was also registered for this degree but did not study Accounting at school. The third and fourth cohorts' academic performance was tracked from 2016 - 2019. Here is a brief discussion, to give the context of the different admission requirements and these four cohorts of students.

The Bachelor of Commerce in Accounting "B. Com Accounting" qualification at this university is accredited by the South African Institute of Chartered Accountants (SAICA). Due to the accreditation with the professional body, it is a structured degree programme, which implies that students are to follow set modules as required by the professional body. This university currently offers the B. Com Accounting degree over three and four years, with the four-year extended programme catering for those learners who require additional support based on an assessment of their competencies on entering the university.

There are two types of minimum requirements for admission to the B. Com Accounting mainstream degree at this university. The first type of admission requirements is for students who studied Accounting until Grade 12. For B. Com Accounting which is a three-year mainstream programme, students must meet the following minimum requirements: English, Code 4 (first or second additional language); any other language, Code 3; Mathematics, Code 4, and Code 5 for Accounting (UWC University Calendar, 2019). The second type of admission requirement is for those students who did not study Grade 12 Accounting. They should obtain Code 5 in Mathematics and meet all the other minimum requirements as stated earlier in this paragraph (UWC University Calendar, 2019).

While there are minimum requirements for the B. Com Accounting mainstream degree, there are also two types of minimum requirements for the B. Com Accounting four-year extended degree programme. The first category of minimum admission requirements are English; Code 3 (first or second additional language) and any other language also at Code 3. In addition to this, students who

completed Grade 12 Accounting should have obtained a minimum code 3 for Mathematics and code 4 for Accounting (UWC University Calendar, 2019). The second category of minimum admission requirements for this extended degree programme is for those students who did not complete Grade 12 Accounting at school and they should obtain a Code 4 for Mathematics (UWC University Calendar, 2019).

The students are all registered for a B. Com Accounting degree at a university in the Western Cape.

1.7.3 Data collection methods

1.7.3.1 Quantitative methods

The quantitative method that was employed to conduct this research included descriptive statistics.

With regards to previous Accounting knowledge, the sample was split into two groups, those with previous Accounting knowledge and those without previous Accounting knowledge. Previous Accounting knowledge was defined as a student who completed the Grade 12 Accounting subject. The group who did not possess previous Accounting knowledge was defined as students who did not complete the Grade 12 Accounting subject. However, all students in the South African education system are required to complete a subject named Economic and Management Sciences until Grade 9. Thus, all students should have some level of Accounting knowledge, but due to the passage of time, it is assumed that students would have forgotten what they had learned. Previous academic performance was measured by using the students' Grade 12 average marks across all subjects completed. The Grade 12 Mathematics mark was used as an indicator of students' mathematical aptitude. English proficiency was measured using the Grade 12 English mark achieved. The sample was split into two groups, namely English home language, and English first additional language. The dependent variable in this study, performance, was students' overall academic performance in each year level of the B. Com Accounting degree.

1.7.3.2 Qualitative method

The qualitative approach was incorporated by conducting focus group interviews with the cohort, namely the 2019 final year B. Com Accounting students and a semi-structured interview schedule was used to ensure that the participants responded adequately and respondents did not deviate from the questions the researcher wanted to elicit and explore topics which they found relevant to the question. The purpose of conducting the focus group interviews was to elicit the participants' opinions and views and to understand the meaning of the problem from the perspective of the participants. (Cresswell, 2014). The students were asked to elaborate on their experiences during their studies in the degree programme, specifically regarding certain factors that they deemed important and which they considered to have helped them succeed in their studies.

1.7.4 Data analysis

The data obtained from the student administration system were sorted and categorized per cohort. The data collected through the focus group interviews were analysed using Atlas.ti. Atlas.ti was used to manage large sets of data and thereafter code and analyse the data (Krueger & Casey, 2015).

1.8 ETHICAL CONSIDERATIONS CAPE

Approval and ethical clearance was obtained from UWC's Higher degrees committee and the Humanities and Social Sciences Research Ethics Committee.

The purpose of the study was discussed with the participants and how the information would be used. Consent was obtained from participants by way of a consent form and it was explained to the participants that their participation in the focus group interviews was voluntary. Participants were informed that they could withdraw their consent at any time. Validity and reliability was ensured through triangulation of data (Cresswell, 2014).

Data was collected through multiple sources and included the results from regression analysis, focus group and document analysis. Personal or sensitive

information was kept confidential and all results were presented in aggregate form so that information identifying an individual was avoided.

All material will be stored for 5 years by the researcher in a secured folder on the researcher's laptop.

1.9 DISSERTATION STRUCTURE

There are six chapters in this thesis, and they are structured as follows:

Chapter 1 provided contextual background to the study in terms of the influence of students' Grade 12 Accounting knowledge on their academic success in their B. Com Accounting undergraduate degree. In addition, the aim and objectives were described, the problem was defined, and the chapter also outlined the research questions. Then, it explained the focus and significance of the study and, lastly, it briefly described the research methodology process followed in the study.

In Chapter 2, the literature provides an overview of the context of the South African school education system, specifically, the review references teachers' lack of Accounting and pedagogical content knowledge. Also, students' Grade 12 academic performance in the National Senior examination is reviewed, with specific focus on Accounting and Mathematics subjects. Then, students' university readiness and the Extended Curriculum Programme implemented at universities are examined. Furthermore, literature on the influence of Grade 12 Accounting, Mathematics, English and Overall Grade 12 marks are reviewed. Lastly, the study's theoretical framework, which is based on the review of Tinto's (1975, 1993, 2017) student retention model and self-determination theory of Deci and Ryan (2017, 2020) is discussed.

In Chapter 3, the research methodology approach followed in this study is described, explained and justified based on existing research methodology experts, procedures and practices.

In Chapter 4, the results of the quantitative data analysed, and a discussion and interpretation of the results are presented. The results from the descriptive statistics are presented.

In Chapter 5, the results of the focus group interviews are presented.

Chapter 6 is the final chapter of this dissertation and presents a summary of the findings and relates the findings to the literature that was reviewed in Chapters 2. It explains this study's contribution to the existing body of knowledge and makes recommendations for the relevant stakeholders. The chapter also notes the limitations of the study and makes suggestions for future research.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In the previous chapter, an overview of the study was provided. As stated in Section 1.3 above, the aim of this study is to determine the relationship between students' Grade 12 Accounting knowledge and their academic success in the B. Com Accounting degree at a university in the Western Cape and the objectives were twofold. Firstly, to determine if there is a statistical difference in overall academic performance between students with Grade 12 Accounting knowledge and those students without Grade 12 Accounting knowledge. Secondly, to determine whether certain factors such as prior Mathematics knowledge, prior overall academic performance, and the language barrier have a relationship with students' overall academic performance.

It is therefore important to first review literature pertaining to the South African school context, thereafter the background of the Mainstream and Extended curriculum programme will be provided. A review of the factors that influence student success and retention in relation to the throughput rate of B. Com Accounting students in the mainstream and extended curriculum programme will then follow. Lastly, an overview of the conceptual framework will be presented. Below are the reviews.

2.2 BACKGROUND ON SOUTH AFRICAN SCHOOL CONTEXT

The no-fee school policy is promulgated in the Amended National Norms and Standards for School Funding (South African Schools Act, 1996). These norms and standards deal with the public funding of public schools, in terms of Section 35 of the Act and the exemption of parents who are unable to pay school fees, in terms of Section 39(4) of the South African Schools Act, (1996). The policy was implemented to redress the inequalities within the education system and so to aid poorer schools. All South African public ordinary schools are placed in one of

five groups, namely quintiles 1 to 5 (South African Schools Act, 1996). These groupings or quintiles are categorised according to the poverty level of the surrounding community (South African Schools Act, 1996). Quintile 1 is defined as the poorest quintile, quintile 2 is the second-poorest quintile, and quintile 5 is the least poor quintile, in terms of the Act. Schools within quintiles 1 to 3 are categorised as no fee schools and schools within the quintiles 4 to 5 are fee paying schools (South African Schools Act, 1996). These quintile groupings are used as a guideline for how much money the state allocates to state schools (South African Schools Act, 1996). Thus, as quintile 1 to 3 are classified as the poorest quintiles, more state funding will be allocated to these designated quintiles, as opposed to the more resourced or least poor quintiles, namely, quintiles 4 to 5 (South African Schools Act, 1996). Also, this means that schools within the quintiles 1 to 3 may not charge schools fees, as they are located in the poorer communities. Schools within quintiles 4 to 5 may charge school fees, as they are located in more resourced communities (South African Schools Act, 1996). According to Hall and Giese (2009), when comparing the target and actual distribution, a much larger proportion of learners nationally attend schools in the no-fee category than envisaged. Generally, the no-fee schools are located in the previously disadvantaged Black communities (Hall & Giese, 2009).

The question at hand is, does the type of school/schooling affect students' academic performance at tertiary level? Concerns have been raised about whether the state allocated funds are sufficient to enable schools — particularly those in poor rural areas — to function effectively (Hall & Giese, 2009). Some schools continue to operate on a budget that inhibits the delivery of quality education or the provision of school infrastructure that is conducive to learning (Hall & Giese, 2009). Spaull (2015) postulates that the vast majority of schools, which served Black learners, remains dysfunctional and unable to impart the necessary numeracy and literacy skills to learners. The 2019 National Senior Certificate results will be interrogated to determine Grade 12 results per quintile below.

WESTERN CAPE

2.2.1 Overall performance per quintile school in the 2019 National Senior Certificate Examination

The National Senior Certificate Examination report 2019 showed that quintile 1, 2 and 3 schools constituted 79% of schools nationally. In nominal terms, quintile 1 (1,815), 2 (1,687) and 3 (1,457) amounts to 4,959 schools, and the total number of schools is 6,300, nationally. Quintile 4 and quintile 5 schools constitute 617 and 724, respectively. The report further shows that the number of no-fee paying schools (quintile 1 to 3 schools) which obtained an overall pass percentage of 80% and above, increased from 1,961 in 2018 to 2,484 in 2019. This category represents 50% of the total number of quintile 1, 2 and 3 schools countrywide. In the same category, 75% of quintile 4 and 5 schools obtained an overall pass percentage of 80% and above. Table 2.8.1 shows that quintile 5 has the highest achievement in the category 80-100%, with quintile 1 receiving the lowest pass rate.

Table 2.1 Overall 2019 NSC performances per quintile (%)

Category	Percentage Pass between 0-19.9%	Percentage Pass between 20-39.9%	Percentage Pass between 40-59.9%	Percentage Pass between 60-79.9%	Percentage Pass between 80-100%	
Quintile 1	2	5	15	31	47	100
Quintile 2	1	4	11	31	53	100
Quintile 3	1	2	12	33	52	100
Quintile 4	0	1	4	29	66	100
Quintile 5	0	0	3	14	83	100

2.2.2 Bachelor passes per quintile in the 2019 National Senior Certificate Examination

In order to qualify for post school studies at a traditional university, learners must obtain a bachelor pass in the National Senior Certificate examination, and the bachelor pass could possibly be used to determine the quality of Grade 12 throughput at school level. Overall, bachelor passes, according to the 2019 National Senior Certificate Examination report, constituted 43% and 45% of total passes in 2018 and 2019, respectively. The report further shows that quintile 5 schools produced almost double the bachelor passes when compared to each of the other quintiles, for 2018 and 2019. Quintile 5 schools represent nearly 12% of total schools in South Africa.

Table 2.2 Bachelor passes per quintile in the 2019 National Senior Certificate Examinations (%)

	THE RIVE WIT	THE THE TH
Categories	2018	2019
Quintile 1	15	16
Quintile 2	16 UNIVER	37TY of the
Quintile 3	18	19
Quintile 4	14	13
Quintile 5	31	29
Other	6	6

2.2.3 Enrolments in quantitative subjects

The aim of this study is to determine the influence of Grade 12 Accounting on university success in the B. Com degree programme and one of the objectives is to determine if Grade 12 Mathematics, amongst others, influences students' academic success in a B. Com Accounting degree. Hence, learner enrolments in

Grade 12 Accounting and Mathematics are important. It is evident that there was a significant decrease in Accounting and Mathematics enrolments over the three-year period, 2017 to 2019 (Department of Basic Education, 2019). One can merely speculate on the reasons for these decreases.

2.2.3.1 Accounting enrolments

It is evident from the 2019 National Senior Certificate Examinations Report that there was a decrease in enrolment for Accounting. The enrolment figure for 2017 was 116,149 learners, in 2018 it was 104, 553 and in 2019 it dropped to 91,581. This translates into a decrease of 21% from 2017 to 2019. One of the reasons for the decrease in Accounting enrolments was the requirement that all Accounting learners must also enrol for pure Mathematics (Child, 2017). This rule was instituted by the Department of Basic Education in 2011 and repealed in 2017 (Child, 2017). Hopefully, the repeal will have a positive impact on Grade 12 Accounting enrolments in future.

Letshwene (2014) suggested the following mechanisms to increase Accounting enrolments: namely, to arrange meetings with accounting firms who can present information to learners about the different accounting career opportunities and get learners excited about studying Accounting. B. Com Accounting students could address learners and share their experiences in the academic sphere. Hopefully, these types of activities will spark the interest in Accounting subjects at schools.

2.2.3.2 Mathematics enrolments

According to the report, 2017 saw 276,084 enrolments, 2018 enrolments were 270,516 and in 2019 they were 256,338. Similarly, there was a decrease in the Mathematics enrolments. It is evident that there is a 7% decrease in the Mathematics enrolment. One reason offered for this decrease is the inability of schools to obtain appropriately skilled Mathematics teachers (Department of Basic Education, 2015). Another reason provided was the introduction of Technical Mathematics, which prepares learners for work in trades such as plumbers, fitters and electricians (McKane, 2020).

In the next section, the curriculum and assessment policy statement (CAPS) will be discussed.

2.2.4 Curriculum and assessment policy statement

There have been several changes by the Department of Basic Education to the overall curriculum which had an impact on the delivery of quality education for all students (du Plessis & Mbunyuza, 2014). The new curriculum and assessment policy statement (CAPS) was implemented as follows: Grade 10 only in 2012, Grade 10 and 11 in 2013 and the entire FET phase in 2014 (Rajoo, 2012). The CAPS curriculum is a modification of the previous curriculum statement, the National Curriculum Statement and offers detailed and clear assistance regarding the subject specific content and assessment (Venter, 2016).

A study conducted to evaluate the implementation of CAPS found the Department of Basic Education implemented the curriculum hastily without proper training to educators and schools (du Plessis & Mbunyuza, 2014). Whilst the previous authors showed that there was a lack of support from the Department of Basic Education, Rajoo (2012) showed that there was also a lack of leadership and guidance from the school management, especially with the implementation of the new CAPS curriculum. Rajoo (2012) found both learners and teachers highlighted learners' lack of Accounting knowledge and skills when they were in Grade 10. This deficit in knowledge and skills were caused by the neglect Accounting suffers during the Grade 8 and 9 years. The author infers that this deficit was also reflected in the matriculation results and thus concludes that this is due to illequipped teachers who lack the necessary knowledge and skills to deliver the curriculum successfully.

Current research revealed that the CAPS Accounting curriculum does not adequately prepare students for the B. Com Accounting degree. According to van Romburgh (2014), a group of first year Accounting students confirmed that the school Accounting curriculum did not adequately prepare them for University Accounting courses. Likewise, the questionnaires given to university lecturers showed that academics felt that there is not enough focus on the basic Accounting

principles and that there are topics which can be omitted from the current curriculum, which would give teachers more time to prepare students for tertiary studies. Ngwenya and Hall (2014) also encourage the omission of certain topics from the CAPS curriculum in order to create time for educators to teach the basic accounting principles in depth. These researchers conducted a comparative study of the National Curriculum Statement (NCS) and CAPS for the Accounting FET phase and found that NCS fortified a learner – centred and activity based approach to education while CAPS gives guidance for assessment, which has multiple implications for teaching strategies. Therefore, these researchers recommend that policy provides a more plain and overt guidance on the pedagogical methods which will encourage active, conceptual and critical thinking and avoid rote learning.

In the next section, teachers' lack of Accounting pedagogical content knowledge will be discussed.

2.3 TEACHERS' LACK OF ACCOUNTING PEDAGOGICAL CONTENT KNOWLEDGE

2.3.1 Teachers' pedagogical content knowledge

Knowledge of theories and methods of teaching is imperative to teaching and the teaching qualification but is secondary to content knowledge of the subject matter to be taught, which is of utmost importance (Shulman, 1986). Shulman differentiates between three categories of content knowledge and defines the categories as follows:

- (a) Content Knowledge. This refers to the amount and organization of knowledge per se in the mind of the teacher. The researcher then further elaborates that content knowledge is not limited to knowledge of facts but includes understanding of the facts and concepts within the subject matter.
- (b) Pedagogical Content Knowledge. A second kind of content knowledge is pedagogical knowledge, which goes beyond knowledge of subject matter per se to the dimension of subject matter knowledge for

teaching. I still speak of content knowledge here, but of the particular form of content knowledge that embodies the aspects of content most germane to its teachability. Pedagogical content knowledge also includes an understanding of what makes the learning of specific topics easy or difficult: teachers need knowledge of the strategies most likely to be fruitful in reorganizing the understanding of learners, because those learners are unlikely to appear before teachers as blank slates.

(c) Curricular Knowledge. The curriculum is represented by the full range of programmes designed for the teaching of particular subjects and topics at a given level, the variety of instructional materials available in relation to those programs, and the set of characteristics that serve as both the indications and contraindications for the use of particular curriculum or programme materials in particular circumstances.

Kathirveloo, Puteh and Matematik (2014) further elaborate that Pedagogical Content Knowledge (PCK) includes teachers' ability to convey the conceptual approach, the understanding and adaptive reasoning of the subject matter.

In the following section, teachers' Accounting content knowledge and pedagogical content knowledge in the South African context are discussed.

WESTERN CAPE

2.3.2 Teachers' lack of Accounting content knowledge and pedagogical content knowledge

A South African study that focussed on the pedagogical content knowledge impediments of Grade 9 Economic and Management Science (EMS) teachers, found that some of them have no formal background in teaching Accounting and as a result paid more attention to Economics and Business Studies (Modise, 2016). Further to this, the time allocated to teach Accounting in the subject EMS Grade 9 was inadequate. Molise (2020) probed the shortcomings in teaching and learning in the Grade 9 EMS subject. The main finding was that Grade 9 Accounting teachers have a deficient content knowledge and competence. Due to

teachers' lack of Accounting content and pedagogical content knowledge, learners do not have a good grounding in the principles of Accounting in Grade 8 and 9. Hence, in Grade 10 Accounting these learners face academic issues due to the insufficient exposure to Accounting in Grade 8 and 9 (Letshwene, 2014). This results in obstacles, not only in terms of teaching, but also learning (Letshwene, 2014). When interviewed, students stated that they did not understand Accounting concepts, which stemmed from their lack of Accounting knowledge in Grade 8 and 9, and also because Grade 10 Accounting is taught in English, which is not their mother tongue (Letshwene, 2014). The researcher further explains that during interviews conducted, Grade 10 Accounting teachers lamented that they essentially had to start teaching the basics of Accounting as the learners lacked the knowledge of the basic principles of Accounting.

Ngwenya (2014) found that although teachers were cognisant of the changes in the Accounting curriculum and the strategies to be utilised to deliver the curriculum, the results showed that the teachers did not operationalise these strategies. The teachers teach Accounting at different grades within the further education and training phase. The empirical evidence showed that the teachers seem to have difficulties to teach and convey the skills required by Grade 10 learners, which is indicative of their limited understanding of the nature of the discipline which focusses on the propositional content knowledge. Further, Ngwenya (2014) found a shallow level of involvement with Grade 10 Accounting scope and content by the teachers and, therefore, the teachers had an underdeveloped understanding of the ever-changing nature of the Accounting curriculum.

An empirical study by Letshwene (2014) further showed that teachers do not have an adequate understanding of teaching methods. Letshwene (2014) states that when teachers and Heads of Departments (HODs) were probed about specific teaching methods employed during lessons none were mentioned. However, when the researcher observed the Accounting lessons, it was noted that the teachers utilised the question and answer method as well as the talk and chalk method.

It also became evident in a study conducted in the disadvantaged areas of Zululand district in which Sikhombe (2018) found that Grade 12 teachers do not have the required content knowledge in Accounting and the appropriate level of teaching ability, which leads to poor academic performance of the Grade 12 learners, amongst other factors. Another study found that in the disadvantaged areas of Limpopo, there is confusion with the implementation of the new curriculum, which leads to students' poor Grade 12 academic performance (Rammala, 2009).

2.3.3 Influence of teachers' content knowledge and pedagogical content knowledge on student success

Guerriero (2014) asserts that the foremost reason for examining teacher knowledge is to improve student achievement. Guerriero (2014) investigated the effect of the improvement of teachers' pedagogical content knowledge on learners' academic performance. The results showed that there was a dramatic improvement in learners' academic performance after the teachers received an intervention to improve their pedagogical content knowledge. In this regard, McKlin, Lee, Wanzer, Magerko, Edwards, Grossman, Bryans and Freeman (2019) show that there is a significant relationship between teachers' pedagogical content knowledge and the students' content knowledge performance, while there was no correlation between teachers' computer science content knowledge and students' content knowledge performance.

In contrast to the findings by McKlin et al., (2019) which found that content knowledge does not influence students' content knowledge performance, the research of Gess-Newsome, Taylor, Carlson, Gardner, Wilson and Stuhlsatz (2019) endeavoured to measure the changes in teacher knowledge and the influence it has on student achievement. Results showed the intervention implemented increased teacher academic content knowledge, general content knowledge and pedagogical content knowledge (Gess-Newsome, et al., 2019). Upon further detailed investigation, it was noted that of all the areas of knowledge, it was the increase in academic content knowledge that significantly influenced student success. The assumption that strong pedagogical content

knowledge is correlated to student learning was dispelled by the evidence obtained from the study (Gess-Newsome, et al., 2019).

Guimarães and Jardon's (2013) study's aim was to determine the influence of teachers' content knowledge on learners' Mathematics achievement. They found that the higher content knowledge of the teacher, the better learners performed in their assessments. One of the limitations of this study was that content knowledge could not be separated from the teacher's other characteristics, namely, motivation and pedagogical knowledge (Guimarães & Jardon, 2013).

In the next section, university readiness will be discussed.

2.4 UNIVERSITY READINESS

University readiness is described as "the overall ability of a student to meet the basic requirements to succeed in higher education without the use of remedial classes and within the recommended timeframe required to complete a qualification" (Agherdien, 2014).

University readiness factors have a direct relationship with academic success and dropout rates at tertiary institutions (Lemmens, 2010). Lemmens' (2010) study found that high school marks, the number of subjects registered for in the first year, goal orientation, race, learning-efficacy, gender and the geographical area of high school attended have a direct relationship with positive academic performance. Agherdien (2014) found that students who obtained high scores on readiness factors had a better chance of succeeding in higher education. Further to this, a statistically significant relationship was found between the type of school attended and the readiness factors for first year Human Resource Management students (Agherdien, 2014). It was also shown that the number of interventions students undergo positively impacts students' readiness and success (Agherdien, 2014).

Another factor that influences student success is whether students' parents obtained a degree (Lemmens & du Plessis, 2011). These researchers found in their study conducted at a previously advantaged higher education institution that, for White students this factor did not play a role in their academic success, whereas

Black students whose parents completed a degree were more successful than Black students whose parents did not obtain a degree.

Studies conducted in the South African context found that the transition from school to university can be challenging. Oduaran and Bechuke (2018) examined how Grade 12 teachers and first year lecturers attempt to grapple with the knowledge gap as learners transition from high school to university in South Africa. The findings of their study revealed that lecturers and teachers recognise the various knowledge gaps but do not have any definite plans to identify and to address the knowledge gaps in the first year of academic studies (Oduaran & Bechuke, 2018). Dos Reis, Venter and McGhie (2019) found that there is a lack of consensus between high schools and tertiary institutions whether learners are adequately prepared for tertiary education. Interestingly, their findings showed that not all high school teachers and lecturers 'are on the same page'. In this regard, interviews conducted with teachers from Quintile 1 schools and lecturers from a University of Technology, showed that there was consensus that schools were preparing learners for post school studies, while teachers from Quintile 4 schools and lecturers from traditional universities agreed that school did not prepare students for university studies (dos Reis et al., 2019). Hence, these findings have a negative influence on students' likelihood of success at university

Venter (2020) established that EMS learners were not prepared for post school studies. When interviewed, learners voiced that the school does not offer career counselling and learners discovered that they do not have the correct subjects for their chosen career paths. Also, learners said that they did not receive assistance from their school with university and bursary applications. She found that one of the prominent factors which led to poor academic achievement was poverty (Venter, 2020). This factor was pervasive and affected the type of school learners attended, which was usually Quintile 1 schools, which had a lack of resources to support learners (Venter, 2020).

On the other side of the coin, when first year South African university students were interviewed, the students believed that they had the necessary skills and were prepared to successfully complete their degree at tertiary institutions

(Monnapula-Mapesela, 2015). When their perceptions were compared to their academic performance, the opposite was found to be true.

In the following section, the background of the Extended Curriculum programme and its influence on student success will be presented.

2.5 BACKGROUND OF THE EXTENDED CURRICULUM PROGRAMME IN SOUTH AFRICA

2.5.1 The need for the Extended Curriculum Programme in South Africa

The following section will focus on the policy changes in the higher education sector which led to the widening access to underprepared students. In an attempt to redress the consequences of apartheid, in terms of higher education in South Africa, the Department of Higher Education decided to widen the access to tertiary education, through the implementation of Extended Curriculum Programmes ("ECP") (van Niekerk, 2013) and address the articulation gap between high school and Higher Education Institutions. The ECP was first established and implemented at universities in 2004 (Department of Higher Education and Training, 2012). The main objective of the policy was to provide students, who meet the minimum requirements for mainstream programmes but who are underprepared, an opportunity to enter degree programmes with adequate support (Department of Higher Education and Training, 2012). These programmes are geared towards first time entering university students, who meet the minimum criteria but due to their background, are underprepared and have low prospects of successfully completing the 3 year degree (Department of Higher Education and Training, 2012). Thus, one of the main aims is to reduce attrition and improve graduation rates for this category of students (Department of Higher Education and Training, 2012).

Four models of ECP were approved by the Department of Higher Education and Training and universities may choose which one of the modules to implement (Department of Higher Education and Training, 2012). The first model is a fully foundational course, where students complete introductory courses in their first year, before they start the mainstream courses. The second ECP model is an extended course, which extends a semester course to a full year course.

Effectively, the first year of the mainstream is completed over the first two years. The third type of ECP model which may be selected is the augmented course, where the content of mainstream modules is taught and has the same duration but incorporates substantial foundation material. This course is distinctive as additional contact time is built into the regular courses, for example, there are ten weekly contact times as opposed to the normal five contact sessions per week. The final type is an augmenting course, where foundation and mainstream courses are presented separately but have a large percentage of integration. The foundation course provides intervention and is then linked to a mainstream course. This type of ECP was only introduced in 2013 (Department of Higher Education and Training, 2012).

As previously stated, the purpose of the ECP is to provide students with access to universities and to provide them with the necessary support to successfully complete an undergraduate degree. In the next section, literature will be reviewed to determine whether widening access resulted in student success.

2.5.2 The success and failures of the Extended Curriculum Programme

As stated in the previous section, the objective of ECP is to provide underprepared students with access to universities and with adequate support to further students' academic success at tertiary institutions. The Council on Higher education (2013) report argues, based on graduation rates patterns over the years, that an important requirement is not simply to widen access but rather to widen successful participation. The Department of Higher Education and Training (2012) reports the comparatively lower dropout rates of 2005 cohort ECP students when compared to their mainstream counterparts. The ECP student dropout rates in their first year of studies were 15%, second year was 7%, third year was 4% and in their final year the dropout rate was 3%. Nationally, there was a 4-point difference in the performance level between ECP and mainstream programmes (final overview report of review of all ECP programmes). The Council on Higher Education (2013) credits the improved performance rates to the expansion of the ECP programmes and showed that ECP students performed comparably with the mainstream students.

In the context of an ECP B. Com Accounting programme, a study conducted at North West University by Magumbo and Nwosu (2019) found that the Accounting ECP students outperformed mainstream students when progression and throughput rates were compared. Confirming the quantitative findings of the study, ECP students stated that they believed that the ECP contributed to their academic performance (Magumbo & Nwosu, 2019).

In the following section, the enrolment requirements for the three traditional universities in the Western Cape will be presented.

2.6 COMPARISON OF DIFFERENT ENROLMENT REQUIREMENTS OF MAINSTREAM AND EXTENDED CURRICULUM PROGRAMMES IN SOUTH AFRICA

The reality is that the enrolment requirements for the B. Com Accounting degree at South African universities differ. At certain universities, Accounting as a school subject is not taken into consideration for this degree, while this is the case at some universities. A comparison of the enrolment requirements for the three universities in the Western Cape is presented. The requirements for the mainstream and extended curriculum programme are presented separately in the tables below.

Table 2.3 Comparison of admission requirements for 3-year B. Com Accounting degree programme

	Grade 12	Grade 12	Grade 12	Grade 12
	Mathematics	English	Accounting	Overall
	requirement	requirement	requirement	academic
				performance
University A	Code 4	Code 4	Code 5	
	(50-59%)	(50-59%)	(60-69%)	N/A
University B	60%	50% for Home	70%	70%
		Language or		
		60% for First		
		Additional		

		Language		
University C	60%	50% for English Home Language or 60% for English First Additional Language	Not applicable	480 points

The University A has a separate admission requirement for students who did not complete Grade 12 Accounting. They should obtain a code 5 (60-69%) in Mathematics and meet all the other minimum requirements as stated above (UWC University Calendar, 2019). The points are calculated using the University's approved point system.

University B has separate admission criteria for students who did not complete Grade 12 Accounting. Students must obtain 70% for Mathematics in addition to the other minimum criteria (SU EMS undergraduate brochure, 2021).

University C requires applicants to write the National Benchmark Test ("NBT") which is also used for admission and selection purposes. This tool is used to determine whether applicants will be placed in the mainstream programme or the academic development programme (UCT Undergraduate prospectus, 2021).

2.4 Comparison of admission requirements for the 4-year B. Com Accounting degree programme

	Grade 12	Grade 12	Grade 12	Grade 12
	Mathematics	English	Accounting	Overall
	requirement	requirement	requirement	academic
				performance
University A	Code 3	Code 3	Code 4	N/A
	(40-49%)	(40-49%)	(50-59%)	

University C	60%	50% for	Not applicable	425-429
		English Home		points
		Language or		
		60% for		
		English First		
		Additional		
		Language		

University A has a separate admission requirement for students who did not complete Grade 12 Accounting. They should obtain a code 4 (50-59%) in Mathematics and meet all the other minimum requirements as stated above (UWC University Calendar, 2019).

University B does not offer a B. Com Accounting Extended Curriculum programme.

From the tables above, it seems that the only difference in the admission requirements for University C's mainstream and Academic Development is the overall average points achieved. Students who achieve higher average points will be admitted to the mainstream programme and the ones who achieve lower average points are placed in the Academic Development programme (UCT Undergraduate prospectus, 2021). Another additional factor taken into consideration when students are placed is the students' achievement in the NBT (UCT Undergraduate prospectus, 2021). Similarly to the average points achieved, students who attain higher scores in Academic Literacy and Quantitative Literacy components of the test, will be placed in mainstream programme and students who have lower scores will be placed in the Academic Development programme (UCT Undergraduate prospectus, 2021).

As evident from the tables above, the universities have differing admission criteria for the SAICA accredited Accounting programmes, with University A having the lowest admission requirement for the programme. Conley (2007) proffered that universities with low admission requirements accept students who are not equipped for university level work. As a result, this has a negative influence on student success and throughput rates.

Both University A and University B have differing admission requirements for students with Grade 12 Accounting and those without Grade 12 Accounting. University C does not take Grade 12 Accounting into consideration at all. However, the university places emphasis on the students' average points and their achievement in the NBT's, which tests students' academic literacy and quantitative skills.

In the next section, the literature relating to the influence of school subjects on students' academic success will be reviewed. Specifically, the literature will focus on the impact of Grade 12 Accounting, Grade 12 Mathematics, Grade 12 English and Grade 12 overall average marks on the students' success in an undergraduate degree programme.

2.7 INFLUENCE OF GRADE 12 ACCOUNTING KNOWLEDGE ON UNIVERSITY LEVEL MODULES

National studies show that Grade 12 Accounting knowledge influences first-year Accounting modules (Oosthuizen & Eiselen, 2012); (Papageorgiou, 2019) and (Matarirano, Panicker, Atoliyah & Mangisa, 2019). Matarirano et al. (2019) and Papageorgiou (2019) both found a statistically significant relationship between high school Accounting and students' academic performance in the first year Accounting modules. Furthermore, Papageorgiou (2019) showed that Grade 12 Accounting knowledge creates a benefit, in first-year Accounting modules, when compared to students who do not have Grade 12 Accounting knowledge. The results revealed that 83% of students with Grade 12 Accounting knowledge passed first-year Accounting in comparison to 60% of students without Grade 12 Accounting knowledge (Papageorgiou, 2019). Then, the results of the study conducted by du Plessis and Gerber (2012) established a strong correlation between Grade 12 Mathematics and Grade 12 Accounting on the academic performance in the first-year university level Accounting module.

A study which examined the correlation between the grade achieved for high school Accounting and the third year Accounting module (Jansen & de Villiers, 2016), found that there was no relationship between the two. These authors, who focused on determinants of success in a third-year Accounting module, also found

that the previous year level of academic performance in the Accounting module plays a significant role in performance in the next level.

International studies showed similar results to the South African studies. The results of a New Zealand study showed that students with high school Accounting knowledge have an advantage over students who did not have high school Accounting knowledge (Tan & Laswad, 2008). This advantage was revealed when academic performance in a first-year Accounting course between the two types of students was compared (Tan & Laswad, 2008). A Nigerian study corroborated the New Zealand study which showed that Grade 12 Accounting has a positive influence on students' academic performance in their first-year university level Accounting modules (Akenbor & Ibanichuka, 2014). Xiang and Gruber (2012) postulate that the benefit of high school Accounting is only beneficial at first year level, however, this benefit diminishes in subsequent year levels. Rowbottom (2013) concurs that high school Accounting aids students in their first year of studies, however, this advantage dissipates and these students have weaker academic performance degree averages by the end of their studies.

Hartnett, Romcke and Yap (2004) examined the impact of various factors on students' academic performance in Accounting courses at an Australian university and provided empirical evidence that there is a statistically significant relationship between their academic performance in Accounting and prior high school ability as well as high school Accounting knowledge. Ibrahim (2015) validated this finding and showed that the cognitive abilities developed through Grade 12 Accounting and Grade 12 Mathematics are imperative in students' success in university-level Accounting.

While this study's main research question focuses on the influence of Accounting as a school subject on students' academic success in a B. Com Accounting degree, the study will also focus on other factors, such as school Mathematics, English, and overall academic performance. The review of the literature on these factors will now be presented below.

2.8 GRADE 12 MATHEMATICS ABILITY

A South African study relating to the predictive quality of National Senior Certificate marks and the National benchmark tests found that there was a noteworthy correlation between Grade 12 Mathematics and first-year financial Accounting marks (du Plessis & Gerber, 2012). In addition, researchers found Grade 12 Mathematics marks were a better predictor and showed the most significant correlation with students' achievement in Mathematics 1 at university (du Plessis & Gerber, 2012). Students with higher Grade 12 Mathematics grades have a higher probability of passing the first-year Accounting modules as opposed to those with lower Grade 12 Mathematics marks (Oosthuizen & Eiselen, 2012). Stainbank (2013) concurs that students with stronger Grade 12 Mathematics and higher overall Grade 12 average marks, performed better than the rest of the cohort with regards to five first-year modules, which included Accounting. Students who performed well in Mathematics (higher grade) and as well as completed Grade 12 Physical Science attained a greater average first-year mark (Smith, Pym, & Ranchhod, 2012). Contrarily, it was also found that Grade 12 English and Mathematics had a statistically weak correlation with academic performance in their first year Accounting studies (Matarirano et al., 2019).

International studies showed similar and opposing results/trends to South Africa. Several studies indicated that school Mathematics plays a significant role in the success in passing Accounting and quantitative modules. High academic performance in Mathematics is also regarded as a very important factor that affects students' academic success at undergraduate level Accounting courses (Guney, 2009). Darlington and Bowyer (2016) concur and further explain that learners who successfully completed Mathematics in Grade 12 are adequately prepared for mathematical content in students' Finance and Business Management degrees.

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Uyar and Gungormus (2011), Crawford and Wang (2014), and Ibrahim (2015) observed from their studies, that prior high school academic performance and Mathematics are all strongly associated with students' academic performance in

the first year Financial Accounting course.

Wong and Chia (1996) showed that students who achieved a higher grade in Mathematics were associated with a higher level of performance in a financial Accounting course. They provided empirical evidence that there is a strong correlation between degree of proficiency in Mathematics and English Language on the students' performance in an Accounting course. A study conducted more than a decade later confirms the finding that students who studied Mathematics at high school achieved higher grades in introductory business courses, except for the cost Accounting module (Alcock et al., 2008). On the contrary, a South African study found that there was no significant relationship between high school Mathematics and a third year Accounting module (Jansen & de Villiers, 2016).

2.9 PROFICIENCY IN THE ENGLISH LANGUAGE

South Africa is one of the few countries in the world which have many official languages, with 11 languages being recognised as official in the country. This national language policy has implications for overall student success at school and at universities as revealed in literature. A recent study found a strong correlation between students who studied English as a first language, English as first additional language and Afrikaans as first additional language with Accounting 1 performance (Papageorgiou, 2017). Poor proficiency in the English language could result in students' inability to decode Accounting concepts that are not part of their daily vocabulary, which could lead to challenges in applying knowledge to solve problems (Koch & Kriel, 2005).

Learners who are taught in their home language which is the official medium of instruction, namely English and Afrikaans, scored higher marks in Mathematics as indicated in a study by Howie (2003). Therefore, learners whose home language is neither English nor Afrikaans were most likely to achieve a lower grade in Mathematics. Similar to the findings by Howie (2003), a South African study found that Mathematics tuition in the first year calculus done in students' home language showed a better academic achievement (Gerber, Engelbrecht & Harding, 2005). A study conducted in both South Africa and Tanzania corroborate these findings and showed English proficiency is a core factor influencing students'

academic success (Brock-Utne, 2007). Wong and Chia (1996) recommend that universities should consider other means of assessing students' proficiency in the English language in order to enhance their academic performance. Their results showed evidence to support the relationship between degree of proficiency in Mathematics and English Language in relation to the students' performance in a first year Accounting course.

Varied research results are noteworthy. Oosthuizen and Eiselen (2012) found that there is not a statistically significant difference in academic performance in first-year Accounting modules between English home language students and English first additional language students. The researchers further noted that English first additional language speakers had poorer communication skills which contributed to most of these students' failure in first-year Accounting modules (Oosthuizen & Eiselen, 2012).

A national study on the determinants of the successful Accounting student found that there was no significant correlation between language and success in the first year Accounting module (du Plessis, Muller & Prinsloo, 2005). Subsequently to this study, Smith, et al. (2012) studied a variety of factors that impact first-year Commerce academic development students and found that English had a statistically weak relationship with academic performance.

The trend of varied results in South African studies seems to extend to the international front as well. Tan and Laswad (2008) found that students with English as their first language perform much better in comparison to students with a language other than English as their first language. However, Crawford and Wang (2014) found that over the four-year period in which the study was conducted, there was no significant performance difference between native English speakers and non – native English speakers. In a country where English is not the students' first language, Harb and El-Sharaawi (2006) postulate that Business and Economic students' proficiency in English has a statistically significant relationship with Arabian students' academic performance. A study conducted in both South Africa and Tanzania corroborates these findings and showed English proficiency is a core factor influencing students' academic

success (Brock-Utne, 2007). Furthermore, Magaji and Umar (2015) found that high school Mathematics and English proficiency had a substantial correlation with academic performance, on average, and assisted students in understanding Financial Accounting as well. A noteworthy finding of the study was that the higher the Mathematics and English marks, the better the average performance in Financial Accounting.

Addow et al., (2013) provide statistical data that demonstrates that there is a statistically significant relationship between English language proficiency and academic achievement of final year Somalian students. This finding indicates that the relationship between English language proficiency and academic achievement is weak. Which further suggests that as English proficiency increases, the academic achievement will not necessarily increase. Contrary to the previous study mentioned, a study conducted in Pakistan showed that English proficiency was significantly correlated to graduates' academic achievement (ud Din & Saeed, 2018). Olanipekun et al., (2014) concur that English proficiency is essential to third year vocational education undergraduate students' performance.

2.10 STUDENTS' OVERALL ACADEMIC PERFORMANCE

Overall academic performance indicators can be predicted according to the results achieved in the National Senior Certificate (Grade 12) (Baard et al., 2010; Jansen & de Villiers, 2016; Papageorgiou, 2017). In a recent study, findings revealed that matric average results above 65% is a useful indicator to predict academic success at university (van Rooy & Coetzee-van Rooy, 2015), while matric average results below 65% cannot be used as guarantee to predict student success. Grades achieved for languages are not strong predictors of students' academic success at university. Their study's findings do not correlate with the empirical evidence of other South African studies (Howe, 2003; Gerber et al., 2005; Brock – Utne, 2007).

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Prior academic ability is a predictor of academic performance at the university level (Yigermal, 2017). A study examined the factors which influence undergraduate students' academic performance and found that overall average

university marks are significantly correlated to average high school grades, amongst other factors (Legese, 2018). It was found that students with high school Mathematics and with higher overall grade averages in high school are more likely to pass the introductory Accounting modules (Crawford & Wang, 2014). Grade 12 Accounting knowledge and Grade 12 Mathematics are strongly associated with students' academic performance in the Financial Accounting course (Uyar & Gungormus, 2011).

2.11 THEORETICAL FRAMEWORK

2.11.1 Tinto's student retention model

2.11.1.1 Introduction

In this section, we will discuss the first of two theoretical frameworks which underpins this study. The first theoretical framework is Tinto's student retention model. The second theoretical framework, which is discussed in 2.11.2, is the Self – determination theory.

2.11.1.2 Student success

In South Africa there are 26 public universities and in addition there are 123 private universities (Department of Higher Education and Training, 2019). Graduate throughput rates in South Africa remains a contentious issue. In a DHET report released in 2019, the overall graduation rates in public universities reached 20,8% in 2016. The report also revealed that the graduation rates amongst White students were still far higher than other race groups for the period 2009 to 2016. The graduation rates in 2016 for Black students were 19,8%, Coloured students were 20,5%, Indian students were 21,1% and for White students it was 25.4%. These statistics are evidence that the throughput rate is low, and the dropout rate is high in South Africa. It is evident in the DHET 2019 report that student retention is a major challenge in the public higher education institutions.

The question of student retention and success is largely influenced by funding for Higher education institutions. According to the National Development Plan (National planning commission, 2012), huge investments in higher education did not result in high levels of academic performance or graduation rates. The Plan

states that higher education tends to be a "low participation, high attrition system".

2.11.1.3 Definitions

Graduation rates are defined as "the number of students who have graduated in a particular year, irrespective of the year of study, divided by the total number of students enrolled at public universities in that particular year (Department of Higher Education and Training, 2018)."

The notion of retention is grounded in student success. The Integrated Postsecondary Education Data System (2008) defines **retention** as follows:

A measure of the rate at which students persist in their educational programme at an institution, expressed as a percentage. For four-year institutions, this is the percentage of first-time bachelors (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions this is the percentage of first-time degree/certificate-seeking students from the previous fall who either re-enrolled or successfully completed their programme by the current fall.

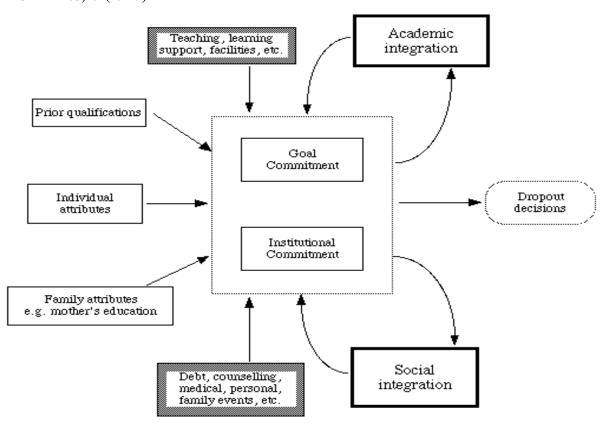
Noel-Levitz (2008) defines **persistence** as follows: Persistence is the enrolment headcount of any cohort compared to its headcount on its initial official census date. The goal is to measure the number of students who persist term to term and to completion. While Progression is the rate at which a cohort participates in any activity that an institution has determined to be correlated with persistence.

Cuseo (2007) defines **student success** as a favourable or desirable student outcome. These desirable outcomes are the following indicators of student success, namely, (a) student retention (persistence), (b) educational attainment, (c) academic achievement and (d) student achievement.

Throughput rate may be defined as: A calculation based on the number of first-time-entry undergraduate students of a specific cohort for a specific year who have graduated either within the minimum time, or up to two years beyond the minimum time, against the number of students in the baseline enrolment of that cohort (Council on Higher Education, 2016). In this study, the throughput rate is defined as the number of students, within a specific cohort, who successfully completed each year level and graduated within the minimum required time.

2.11.1.4 Tinto's Student retention model

Figure 2.1: Tinto's Student retention model as adapted by Draper (2008) from Tinto, $V\left(1975\right)$



Tinto's retention model is one of the theories which will frame this study. The main idea of Tinto's retention model is student integration, which predicts whether a student will decide to persist or dropout of their post school studies (Draper, 2008). The model further explains that integration consists of academic and social integration (Tinto, 1975). As the level of academic and social

integration changes over the course of study, as well as interrelate with commitment, it affects the decision to dropout (Draper, 2008). Social integration includes factors such as making friends, personal contact with lecturers and whether the student enjoys being at university (Draper, 2008). Tinto (1975) describes academic integration to include factors such as grade performance, academic self-esteem, whether the student enjoys the modules and identification with academic norms and values and one's role as a student. Although academic integration is dependent on students' satisfaction with their academic experiences, their satisfaction may depend on their aptitude to meet educational and academic standards (Clark, Middleton, Nguyen & Zwick, 2014). Tinto (1993) postulates that academic integration will be achieved when the expectations of both student and the academic institution are met, specifically, when the student meets the academic expectation of the institution and the institution meets the students' educational needs. If both expectations are met, then it is likely that a student will become committed to the institution (Clark et al., 2014).

An important factor in student success was student involvement, which included academic and co-curricular activities, and connection with fellow students, lecturers, faculty and shared values with the institution (Astin, 1997).

In his previous work, Tinto's model of student retention focuses on the academic institution and what it can do to help retain students. In his later work, Tinto (2017) reflects on student retention, but from the students' perspective. For students, the important goal is persisting in order to complete their degree and this goal is congruent with the goal of the university (Tinto, 2017). The focus should not only be on university's retention programmes, but also on student's persistence or motivation and how university can encourage and support students' motivation to complete their degrees. Tinto (2017) asserts that students' motivation includes a belief that they have the ability to succeed and complete their degree. This is derived from the theory of Bandura, which further elaborates that people will persevere during difficult time and will be incentivised to accomplish their goals if they believe that their actions will result in the desired goal (Bandura, 2010). Furthermore Tinto (2017) states that another aspect of

student motivation is the development of a sense of belonging or a being part of the academic institutions' community. Students must feel and believe that they matter and belong (Tinto, 2017). The last element of student motivation is the curriculum and students' enjoyment, interest and perception of value in what they are taught.

In the next section, an overview of student motivation, with specific reference to the self-determination theory will be presented. As stated in Section 11.1.1, the self – determination theory is the second theoretical framework which frames this study.

2.11.2 Student motivation: The self-determination theory

As previously stated by Tinto (2017), student motivation is key to students persisting and successfully completing their degrees. One of the theories of student motivation and the one that will be discussed in this section is the self-determination theory. The framework of self-determination theory ("SDT") is an extensive theory of human development (Ryan & Deci, 2020). SDT focusses on human beings' innate motivational tendency for learning and development and how it can be aided and encouraged (Ryan & Deci, 2020). For development to take place, SDT contends that there are three essential psychological needs that must be supported and be met. These are, namely, autonomy, competence and relatedness (Ryan & Deci, 2020). These authors further argue that if any of these needs are frustrated, this could have negative effects on motivation and wellness. Of particular importance are its effects on motivation and wellness within the education setting (Ryan & Deci, 2020). Autonomy, competence and relatedness are defined and discussed in the next section. Ryan and Deci (2020) define autonomy, competence and relatedness as follows:

Autonomy concerns a sense of initiative and ownership in one's actions. It is supported by experiences of interest and value and undermined by experiences of being externally controlled, whether by rewards or punishments.

Competence concerns the feeling of mastery, a sense that one can succeed and grow. The need for competence is best satisfied within well-structured environments that afford optimal challenges, positive feedback, and opportunities for growth.

Relatedness concerns a sense of belonging and connection. It is facilitated by conveyance of respect and caring.

2.11.2.1 Self-determination theory's taxonomy of motivations

In the context of education, one of the main hypotheses of SDT is that more autonomous forms of motivation will lead to an enhancement of students' engagement, learning and wellness. SDT asserts that when the psychological needs are supported, that results in improved intrinsic motivation and internalization, which leads to higher academic achievement (Ryan & Deci, 2020). Conversely, when extrinsic motivation is applied, it generally results in lower motivation and academic performance (Ryan & Deci, 2020).

2.11.2.2 Intrinsic motivation

Deci and Ryan (2000) define intrinsic motivation as activities which human beings engage in for personal benefit and for enjoyment. They engage in tasks because they derive satisfaction from them (Ryan & Deci, 2020). The authors further argue that it is this intrinsic motivation which propels people to learn and master new skills and drives student's success in an educational context.

2.11.2.3 Extrinsic motivation

According to SDT there are four subcategories of extrinsic motivation, namely: external regulation, introjection, identification and integration (Ryan & Deci, 2020). External regulation is based on external rewards and punishments and is non-autonomous. Introjection is classified as extrinsic motivation which was partially internalized. Furthermore, this behaviour is driven by internal rewards of self-esteem, which is based on outcomes such as academic success and escaping feelings of anxiety, shame or guilt from failure. The two aforementioned categories are also known as controlled motivation. The two subcategories of extrinsic motivation, namely identified and integrated regulation, involve a certain

degree of autonomy. Identified regulation means the person identifies the importance of the activity and the person acts with a high level of autonomy. Operating at a higher level of autonomy than identified regulation, in integrated regulation, the person identifies the value of the activity but also finds it to be compatible with other core interests and values. The latter two extrinsic subcategories are similar to intrinsic motivation, in the sense that people show a high degree of autonomy but may be contrasted due to the fact that intrinsic motivation also involves a sense of enjoyment.

2.11.2.4 Studies on the Self-determination theory (SDT)

A study conducted on SDT found that both intrinsic motivation and autonomous categories of extrinsic motivation are beneficial for students' academic success (Niemiec & Ryan, 2009). It is also determined that autonomous self-regulation is enabled by teachers' support of students' fundamental psychological needs for autonomy, competence and relatedness (Niemiec & Ryan, 2009). A study conducted by Jeno, Danielsen and Raaheim (2018) explored a model based on SDT, to predict biology students' academic achievement and dropout intentions at a Norwegian university. A significant finding of this study revealed that autonomous motivation and perceived ability are positive predictors of students' academic achievement and conversely, a negative predictor of intention to dropout. While it was also found that higher levels of intrinsic motivation had a positive relationship with students' academic performance, however, a combination of moderate extrinsic motivation, integrated with higher intrinsic motivation levels, yielded a significant and positive relationship with academic performance (Lin, McKeachie & Kim, 2003). This finding was supported by Kusurkar, Ten Cate, Vos, Westers and Croiset (2012), who found that relative autonomous motivation, which is a combination of extrinsic and intrinsic motivation, positively influenced academic performance.

In contrast to the aforementioned findings, it was revealed in an empirical study that intrinsic motivation was the only motivation type that consistently and positively influenced high school and college students' academic success over a period of time (Taylor, Jungert, Mageau, Schattke, Dedic, Rosenfield & Koestner,

2014). Corroborating the study above, Clark, Middleton, Nguyen and Zwick (2014) further noted that it required intrinsic motivation to accomplish goals and intrinsic motivation to know/learn, which indirectly, but positively influenced students' academic performance, through academic integration. Another aspect of the study found a positive relationship between academic integration and academic performance. Similarly, a longitudinal study conducted by Corpus, McClintic-Gilbert and Hanyenga (2009) revealed that intrinsic motivation and school learners' academic performance positively influence each other. Conversely, a study conducted in South Africa found that intrinsic motivation does not influence academic success (Mnyandu, 2001).

2.12 CONCLUDING SUMMARY

In this chapter, a literature review was presented, pertaining to the South African school context, university readiness, thereafter the background of the Mainstream and Extended curriculum programme. The chapter also provided a review of the factors that influence student success and retention in relation to the throughput rate of B. Com Accounting students in the mainstream and extended curriculum programme. Lastly, an overview of the theoretical framework was presented, which included the discussion of Tinto's retention model and students' motivation to succeed, particularly the discussion on the self-determination theory was presented. A detailed discussion of the research methodological processes followed in this study is presented in the next chapter.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In the previous chapter, the literature review was presented as well as the theoretical framework. This chapter will focus on detailed description of the research methods and processes followed for the study. Firstly, the aim and objectives of the research will be reiterated, as well as the main research and subquestions. Then the research paradigm, research design, research methods utilised will then be discussed.

3.2 AIM AND OBJECTIVES OF THE STUDY

The study aims to determine the relationship between students' Grade 12 Accounting knowledge and their academic success in the B. Com Accounting degree at a university in the Western Cape. The first objective of the study is to determine if there is a difference in overall academic performance between students with Grade 12 Accounting knowledge and those students without Grade 12 Accounting knowledge. The second objective of the study is to determine whether other factors such as prior Mathematics knowledge, prior overall academic performance, and the language barrier have a relationship with students' overall academic performance.

3.3 MAIN RESEARCH QUESTION AND SUB-QUESTIONS

Given the context described in Chapters 1 and 2 above, the main research question of this study was:

Are students with previous Grade 12 Accounting knowledge more successful in the completion of the B. Com Accounting degree than students without previous Grade 12 Accounting knowledge?

Two sub-questions guided the data collection and analysis process, namely:

- What other school subjects influence students' successful completion of a B. Com Accounting degree?
- What overall academic predictors influence the successful completion of a B. Com Accounting degree?

3.4 RESEARCH PARADIGM

This study is situated within the pragmatism paradigm. Pragmatism offers a paradigm for social science research, particularly for mixed method research (Morgan, 2014(b)). The mixed method researchers see the pragmatism research philosophy as a continuum where researchers utilise both quantitative and qualitative data resulting in a better understanding of social reality (Wahyuni, 2012). Pragmatism insists on treating research as a human experience that is based on the beliefs and actions of actual researchers (Morgan, 2014(a)). It is also steered by the researcher's determination to produce useful information (Feilzer, 2010).

Pragmatism is a combination of both positivism paradigm and interpretive paradigm (Rahi, 2017). As a paradigm, positivist researchers believe that true knowledge can only be produced through scientific methods and use quantitative methods (Rahi, 2017). The interpretive paradigm believes in exploring deep meaning and developing subject meaning from others' experiences and uses qualitative methods (Rahi, 2017). The aim of positivism is to apply deductive reasoning to confirm a well-established theory, using primary data analysis (Parvaiz, Mufti & Wahad, 2016), while the interpretive approach utilises inductive reasoning to develop a theory (Parvais et al., 2016). Morgan (2007) argues that in pragmatism, the researcher moves back and forth between deductive and inductive reasoning. This combination of deductive and inductive reasoning is termed as abductive reasoning (Morgan, 2007). The research paradigm known as pragmatism promotes the use of mixed method research and a continual cycle of abductive reasoning (Feilzer, 2010). Pragmatism may be used as a model for a top down deductive research design as well as for grounded inductive or abductive research (Feilzer, 2010).

Most researchers who employ mixed methods research are inclined to do so

because of the practicality which pragmatism offers, rather than based on the philosophical viewpoint (Morgan, 2014(a)). Mixed method research seeks to examine a specific research question with the most appropriate research method (Feilzer, 2010). In the pragmatism paradigm, the researchers use both quantitative and qualitative research methods to understand and solve the research problem (Rahi, 2017). Pragmatism proposes that research is a process that actively combines purposes and procedures (Morgan, 2014(b)). The process begins with the research question, then the research design and then followed by the selection of research methods (Morgan, 2014(b)).

The use of mixed methods is to enlighten and enable the different methods to complement each other by addressing different facets of the study (Feilzer, 2010). By using pragmatism as a paradigm, the process involves the merging of strengths of both quantitative and qualitative research methods (Morgan, 2014(b)). An evaluation of the combined strengths of mixed method research must be completed, not just the separate strengths of the individual methods (Morgan, 2014(b)).

The pragmatic approach provides the researcher with the autonomy to design research methodologies that would best suit the aims and objectives of the research study. This then in turn stimulates the researcher to reflect on the choices made and refine as needed (Clarke & Visser, 2019). The pragmatic approach allows the researcher the freedom to tailor the research methods and methodologies which best address the problem (Clarke & Visser, 2019). One of the key advantages of pragmatism is to provide the researcher the opportunity to concentrate on how best to answer the research problem (Clarke & Visser, 2019).

Generally, Accounting research is situated within the positivism paradigm, mainly due to the mainly numerical-based issues within the profession (Wahyuni, 2012). However, there is space for Accounting researchers to utilise the interpretive approach as this would assist the researcher who seeks to provide a better understanding of functioning Accounting practices (Wahyuni, 2012). Accounting research, as a social science, does not have a consensus on paradigms for research and Norreklit, Norreklit and Mitchell (2010) propose pragmatic constructivism as

a paradigm for Accounting research. Brierly (2017) concurs and argues for the use of the pragmatic approach when conducting Accounting research. The incorporation of both qualitative and quantitative methods in Accounting research can bring about new and deeper understanding of new Accounting issues (Lamprecht & Guetterman, 2019).

Pragmatism has been criticised as a philosophy. This stems from the fact that it does not address the differing assumptions of quantitative and qualitative paradigms (Maarouf, 2019). The author argues that pragmatism is a logical and cohesive paradigm which has ontological, epistemological and axiological stances. Another criticism of pragmatism is that it does not have a paradigm and this lack of paradigm might invalidate the findings of such research (Hall, 2013). The pragmatic approach may be challenging to an inexperienced researcher, due to its lack of instruction. The freedom offered by the pragmatic research methodology is advantageous, but it requires experience in research methodologies to employ the appropriate research methodological knowledge may be a hindrance to the inexperienced researcher (Clarke & Visser, 2019).

3.5 RESEARCH DESIGN

In this study, an explanatory sequential design was used. In this mixed method design, the research starts with the quantitative study and is followed with the qualitative study. In this manner, the results of the qualitative study can help explain the results of the quantitative study (Lamprecht & Guetterman, 2019). The explanatory sequential design begins with the quantitative study and thereafter the qualitative research methods are employed to investigate the research questions in more depth. The initial results of the quantitative study are used to determine and/or refine follow-up questions in the qualitative phase (Lamprecht & Guetterman, 2019). Integration takes place when the results of the qualitative phase are used to explain the quantitative results (Lamprecht & Guetterman, 2019). Integration can be attained through merging. Merging happens when the results of the qualitative and quantitative phases are brought together for examination and comparison (Lamprecht & Guetterman, 2019).

3.5.1 Quantitative method

Quantitative methods entail the processes of collecting, analysing, interpreting, and writing the results of a study (Cresswell, 2014). Specifically, the method includes steps, such as identifying a sample and population, determining the type of design to be used, collecting and analyzing data, then presenting and interpreting the results (Cresswell, 2014). According to Cresswell (2014) the purpose of employing quantitative methods is to provide a proposed explanation for the relationship among variables being tested. The quantitative methods that were employed to conduct this research included descriptive statistics, using data from the university's student administration system. An overview of the quantitative data collection method will be discussed below.

3.5.1.1 Descriptive Statistics

Descriptive statistics uses numerical techniques to organize, present, describe and analyse data within a given sample (Fisher & Marshal, 2009). Descriptive statistics is used to report the simple features of the data and provides basic summaries of the data used in the study (Mishra, Pandey, Singh, Gupta, Sahu & Keshri, 2019). Further to this, the aim of descriptive statistics is to describe the midpoint of a collection of scores, known as central tendency and the spread of the scores, known as the variance (Fisher & Marshal, 2009).

Categorical and continuous data is defined as follows by Fisher and Marshal (2009):

Nominal (or categorical) level of measurement is the scoring of cases/participants into broad categories. For example, you may be interested in determining the difference in health outcomes between men and women.

Continuous level data are usually directly measured using infinite scales where the increments on the scale are of equal distance (e.g. weight in grams, pressure in mmHg and volume in millilitres). Continuous data can be divided into interval and ratio levels of measurement.

In this study, the independent variables were the academic performance codes students obtained for Grade 12 Accounting, Grade 12 Mathematics, Grade 12 English and the APS score. The Grade 12 codes obtained for the aforementioned high school subjects are labelled as categorical data.

The dependent variable in this study is students' average academic grades in each year level of the B. Com Accounting degree. This is labelled as continuous data. The outcomes of the descriptive statistics will help the researcher to determine whether Grade 12 Accounting influences students' academic performance in a B. Com Accounting degree.

3.5.2 Qualitative method

Qualitative methods are utilised to collect, analyse and interpret data which differs from the traditional quantitative approaches (Cresswell, 2014). Quantitative research methods include purposeful sampling, collection of open-ended data, analysis of text or pictures, representation of information in figures and tables, focus groups interviews and personal interpretation of the findings (Cresswell, 2014). For this study, the qualitative research method that was used was focus group interviews. This method was used in order to elicit BCom Accounting students' views on high school subjects which they believe aided their success in their degree. A review and explanation of the focus group interviews will be carried out and discussed below.

3.5.2.1 Data generation methods

Focus group interviews were conducted with the 2019 final year B. Com Accounting students. Wilkinson (1998) explains that this type of qualitative research method is preferred when the researcher would like to prompt the participants' thoughts or ideas regarding a particular issue within a group dynamic. The students were asked to elaborate on their experiences during their studies in the B. Com Accounting degree programme, specifically regarding certain factors that they deem important and which they consider helped them succeed in their studies. In the Accounting education context, there is a dearth of research exploring students' perspectives on the influence of Grade 12 subjects on

their academic performance in a B. Com Accounting degree. Most studies, as alluded to in the background and the literature review, focus on quantitative research to determine the influence of Grade 12 subjects on the academic performance of students.

The purpose of the study determined the type of participants that should be selected for focus group interviews (Krueger & Casey, 2015). A further consideration includes who should be included in the focus groups and their level of familiarity and experience with the research question (Cameron, 2005).

The objective of the research determined whether the focus groups should consist of heterogeneous or homogeneous groups (Cameron, 2005). Generally, focus group research generally makes use of homogeneous groups of people (Morgan, 1997). Homogeneity, in this context, means that the participants have something in common which the researcher has an interest in (Krueger & Casey, 2015). Morgan (1997) however cautions that homogeneity means participants have a shared experience and not a shared attitude.

Various rules of thumb exist regarding the size of the focus group. According to Morgan (1997), the rule of thumb regarding group size is 6 – 10 participants. However, Kitzinger (1995) asserts that the quintessential group size is between 4 and 8 people, while Hopkins (2007) stated 3 - 12 participants were utilised for his research project, and Krueger and Casey (2015) stated that the perfect size of focus groups are between 5 and 8 participants. For this study, the group size was between 3 -12 participants.

The aims and objectives of the research project would determine the number of groups required (Kitzinger, 1995). Cameron (2005) and Morgan (1997) agree that one rule of thumb is to hold at least three to five focus group interviews. Ultimately, the researcher should do as many group interviews to obtain a reliable answer to the research question as required (Morgan, 1997). How much data should be collected depends on various factors such as other data collecting methods, the motive of the research, and the saturation of data (Kidd & Parshall, 2000). One guideline that can be used to determine whether enough data has been

gathered from focus group interviews is to decide whether conducting further focus group interviews would gather any new or meaningful information or insights (Cameron, 2005; Morgan, 1997). For this study, three focus groups were interviewed. Initially, four focus group interviews were scheduled but due to scheduling conflicts, only three were conducted.

Organising and conducting focus group interviews is time-consuming as a data collection strategy, however, it is also worthwhile (Rabiee, 2004). The rule of thumb regarding conducting relatively structured focus groups will result in analogous answers across the different focus group interviews, while a less structured approach will be conducive for an exploratory or novel type of research (Morgan, 1997). When the less structured approach is used, it allows the participants to discuss the concepts that interest them (Morgan, 1997). Morgan (1997) asserts that a compromise between the two methods can be used, which is known as a funnel strategy. In the funnel strategy, the interview commences with a less structured approach and then moves towards a more structured interview with specific questions. For this study, semi-structured focus group interviews were conducted.

The researcher who is best acquainted with the aims and objectives of the research would be best suited to conduct the interviews (Cameron, 2005). Cameron (2005) further elaborates that the moderator would commence the group interviews by giving context to the research and/or research question and the expectations from the focus group interviews. Focus group interviews are usually audiotaped or video-taped and the moderator would usually also take notes (Wilkinson, 1998). Krueger and Casey (2015) recommend that digital recorders are used to record the focus group interviews. At the start of the interview, it is best to inform participants that the interviews will be recorded (Krueger & Casey, 2015). In this study, the participants were informed that the focus group interviews will be audiotaped.

During the interviews, the moderator should be attentive to participants' answers and ask to follow up questions if responses do not make sense (Cameron, 2005). The collection of data and the analysis of the data should be completed

simultaneously (Krueger & Casey, 2015). It is recommended by Cameron (2005) to transcribe and to subsequently perform a cursory analysis of the first focus group interview before conducting the remaining groups. This ensures that questions make sense to participants and further, that the interview brings about the type of information required (Cameron, 2005). Krueger and Casey (2015) agree and state that this creates the opportunity to improve the data collection process when performing the next focus group interview.

Incentives may be offered to the participants. These incentives may take a variety of forms. Food, for example, maybe offered to range from light snacks to full meals (Krueger & Casey, 2015). Participants in this study were provided with snacks after the focus group interviews.

There are various options when a researcher arrives at the transcribing stage (Krueger & Casey, 2015). They may decide to prepare a full transcript, an abridged transcript, transcribe certain quotes only, do not transcribe and only listen to the audio recording or, lastly, not listen or transcribe and keep the documents on file (Krueger & Casey, 2015). After the completion of the interviews, the audio – or video tapes should be transcribed (Wilkinson, 1998). After all the interviews are transcribed, the researchers must familiarise themselves with the material by listening to the tapes again, re-reading the transcripts, and the field notes (Rabiee, 2004). The researcher in this study transcribed the interviews from the audiotapes. The researcher re-read the transcripts in order to acquaint themselves with the material. Then, the researcher should identify common concepts and ideas from the answers provided by participants (Rabiee, 2004).

Data collected from focus group interviews cannot be generalised and interviews should only reflect the findings from the focus groups (Cameron, 2005). One of the objectives is to understand and interpret the individual quotes and to also determine if there are any trends or links between quotes (Rabiee, 2004). After the coding process has been completed, the researcher should prepare an account that describes the findings (Krueger & Casey, 2015). After all the answers have been coded and categorised, the researcher may commence with the writing of the

report. This will give the researcher a sense of the number of times a code was said. Further than just observing the frequency of codes or comments, the researcher will consider how many people mentioned a concept, the detail provided about the concepts by participants, etc. (Krueger & Casey, 2015). One method to analyse data from transcripts is to use a word processing programme. Another method is Excel or Atlas.ti and NVivo. The latter is used to manage large sets of data, but the researcher still must code and analyse the data (Krueger & Casey, 2015).

3.6 RESEARCH METHODS

As previously stated, a mixed methods approach was followed to determine the influence of students' Grade 12 Accounting knowledge on their academic success in a B. Com Accounting degree. A detailed discussion of the research participants, research site, quantitative and qualitative data collection methods follows below.

3.6.1 Research participants and research site

The data was collected from the entire population of students registered for the B. Com Accounting 3-year degree in 2017 and students registered for the B. Com Accounting 4-year degree in 2016. The total number of students involved in this study is 260. In order to address the first objective of this study, namely to determine if there is a statistical difference in overall academic performance between students with Grade 12 Accounting knowledge and those students without Grade 12 Accounting knowledge, students enrolled for both degrees were split into students with Grade 12 Accounting and those without Grade 12 Accounting. Thus, four cohorts were formed, namely cohort one, cohort two, cohort three and cohort four. The first cohort were students who registered for mainstream B. Com Accounting and did Accounting as a school subject and the second cohort is also mainstream B. Com Accounting but enrolled students who did not do Accounting as a school subject. These two cohorts' academic performance was tracked from 2017 until 2019. The third cohort of students is registered for B. Com Accounting 4-year degree (Extended Curriculum Programme) and who did Accounting as a school subject and the fourth cohort is

also registered for this degree but did not study Accounting at school. The third and fourth cohorts' academic performance was tracked from 2016 - 2019. The number of students per cohort is 114, 35, 104 and 7 for cohort 1, cohort 2, cohort 3 and cohort 4, respectively.

All data was collected from the university's student administration system. The data collected included students' demographic information as well as National Senior Certificate codes obtained for Grade 12 subjects, namely Mathematics, Accounting, English (home or first additional language). The university's Admission Point System ("APS") was used to calculate students' individual admission points. Furthermore, students' average marks per year level were also obtained. The research was conducted in and around the University. This research site was chosen due to its convenience for the participants.

3.6.2 Quantitative design

3.6.2.1 An overview of descriptive statistics as a data collection method

For the purposes of the study, descriptive statistics was employed at the first stage of the statistical analysis of the data. It was utilized to describe demographics of students and compare students' academic performance between those with Grade 12 Accounting knowledge and students without Grade 12 Accounting knowledge. Descriptive statistics was used to calculate average final marks per cohort, pass numbers and pass rates, throughput numbers and throughput rates. Students who enrolled for the B. Com Accounting mainstream degree in 2017, namely cohort 1 and cohort 2, were compared with each other and students who registered for B. Com Accounting ECP degree in 2016, namely cohort 3 and 4, will be compared against each other.

The data for this study was a combination of categorical/discrete data and continuous data. The data for Grade 12 English, Grade 12 Mathematics and Grade 12 Accounting codes was available for this study, not the actual raw marks achieved. The Grade 12 codes represent the independent variables. Thus these variables are classified as categorical data as the data was grouped into the various codes used by Umalusi, for example code 4,5,6,7 and 8. The actual raw marks for

average undergraduate academic performances were available for this study. This variable is thus classified as continuous data and is the dependant variable.

The independent variables in this study were the codes students obtained for Grade 12 Accounting, Grade 12 Mathematics, Grade 12 English and the APS score. With regards to previous Grade 12 Accounting knowledge, the sample was divided into two cohorts, students who enrolled with Grade 12 Accounting knowledge and those who enrolled only with Grade 12 Mathematics. However, we would like to highlight that all students in the South African education system are required to complete a subject called Economics and Management Sciences in Grades 7, 8 and 9. As such, all students would have some level of Accounting knowledge, but due to the passage of time, it is assumed that students would have forgotten what they learned. Moreover, the Grade 12 Mathematics mark is used as an indicator of students' mathematical aptitude. English proficiency was measured using the Grade 12 English mark achieved. The overall Grade 12 academic performance was calculated using the UWC's admission point system.

The dependent variable in this study, are students' average academic grades in each year level of the B. Com Accounting degree.

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3.6.3 Qualitative design AND CAPE

3.6.3.1 An overview of focus group interviews as a data collection method

Focus group interviews are unique as a method of data collection and for the nature of the data collected (Wilkinson, 1998). Researchers from various disciplines often use focus group interviews to gather data from various individuals at the same time (Onwuegbuzie, Dickenson, Leech & Zoran; 2009). Focus group interviews consist of multiple group discussions where the participants discuss issues selected by the researcher (Wilkinson, 1998). Wilkinson (1998) explains that this type of qualitative research method is preferred when the researcher would like to prompt the participants' thoughts or ideas regarding an issue within a group dynamic. Kitzinger (1995) concurs with Wilkinson (1998) and elaborates further that this method also illuminates how and why interviewees think in a particular manner that they do. The benefit of using

this method of interviews is the opportunity to produce data through group dynamics amongst the participants (Kitzinger, 1995). Hopkins (2007) and Parker and Tritter (2006) agree with Kitzinger (1995), however, Parker and Tritter (2006) further assert that group dynamics are of paramount importance as they create an insight that cannot be provided by any other method. Stokes and Bergin (2006) acknowledge the importance of group dynamics but further caution against the significant influence it has on the views expressed within the focus groups, which could be contrary to the individual's views. A disadvantage of this method is that the data collected from focus group interviews may not be generalizable, since samples are small and not representative of the population tested (Wilkinson, 1998). Initially, focus group interviews were primarily employed to triangulate data between the qualitative and quantitative methods used (Kidd & Parshall, 2000), which is exactly their purpose in this study.

3.6.3.2 Selecting and recruiting participants

The purpose of conducting focus group interviews was to elicit final year students' opinions about the influence of Grade 12 Accounting, Grade 12 English, and Grade 12 Mathematics on their academic success in their B. Com Accounting degree. A list of final year students was obtained from the university' student administration database. Only first-time final year students in the three-year B. Com Accounting programme and first-time final year students in the B. Com Accounting ECP degree, who were registered for all four final year modules, were chosen. Hence, no repeat students were selected for interviews. After eliminating all repeat students, the participant pool was reduced to 125 students. Thus, all first-time final year students were invited to participate in the interview. Random sampling was not required as the group of participants was homogenous, namely, final year B. Com Accounting students with similar experiences.

An initial email was sent to all qualifying students, inviting them to participate in the focus group interview. Also, included in the email was the participant information sheet, which described the context and nature of the study, the research questions as well as the consent form which the participants were required to complete, if they were willing to partake in the process. A total of eighteen students responded positively and participated in the focus group interviews.

3.6.3.3 Composition of focus groups

The groups were homogeneous because all the participants were B. Com Accounting students and would have a similar experience, especially in the latter part of their degree.

3.6.3.4 Size of groups

In the first group, a total of five participants joined the interview, followed by six students in the second group and then seven students who part in the study. The participants in the specific groups were diverse in terms of gender, however, not in terms of the spread across the different cohorts. In the first interview, there were three participants from cohort 1 and two participants from cohort 3. In the second interview, five participants were from cohort 1 and one participant was from cohort 3. In the final interview, five participants were from cohort 1 and two participants were from cohort 2. Most of the participants, 13 out of 18 or 72%, were from cohort 1. Thus, the groups were not very diverse in terms of the cohorts and so a large number of groups were not required. This also supports the researcher's view that saturation was obtained after the third interview. The number of participants per group was determined by availability of students.

3.6.3.5 Number of groups

Considering the number of students willing to participate in the study, students' availability, and general time constraints of the study, three focus group interviews were conducted. Initially four interview groups were scheduled. The second focus group interview and the third interview were postponed once, and a fourth interview had to be cancelled due to student protests at the university where the study took place. Ultimately, a fourth interview was not required as the researcher determined that saturation had been reached by the end of the third interview. No new information had been gathered and further interviews would probably not have brought about new insights. Thus, the researcher was satisfied

that saturation had been reached by the end of the third interview and no further interviews were required.

3.6.3.6 Research questions

The purpose of the focus group interviews was to obtain final year students' opinion on Grade 12 subjects which assisted them in their academic success in a B. Com Accounting degree. To fulfil the purpose of the research, the following questions were asked during the focus group interviews:

- 1. In your opinion do you believe that Grade 12 Accounting assisted you to be successful in your first and second year of your degree?
- 2. What other Grade 12 school subjects assisted you to be successful in your first and second year of your degree?
- 3. Do you think that the school that you matriculated from played a role in your academic success thus far in your degree programme?
- 4. Is the language of instruction an impediment to your studies? If so, please elaborate.

3.6.3.7 Conducting the interviews RSITY of the

As stated in the initial invitation to participate and the participant information sheet, the students were reminded that the interview was not structured. Specific questions were asked however, students were allowed to answer the questions as well as branch out into topics which were related and relevant to the question at hand. The main researcher conducted all three group interviews. At the commencement of the focus group interviews, the moderator discussed the participant information sheet, including the nature of the study, the research questions, and the contents of the consent form. All students present signed the consent form in the presence of the researcher. Students were also informed that the interviews would be recorded. The interviews were recorded using the voice recorder application on the moderator's mobile phone and iPad. Students were advised that their identities would not be revealed in the results of the study.

During the interview, research questions were posed to students. The researcher also filled the role as moderator for the focus group interviews. The researcher would not move to the next question without contribution from each participant. The moderator asked clarifying questions and follow-up questions where necessary.

After the interview, light snacks were provided to all the participants.

3.6.3.8 Analysing data

Full transcriptions were prepared for all three of the interviews from the recordings made. Then, the recordings were listened to again to ensure that the transcripts are an accurate reflection of the group interviews. The full transcripts were analysed using Atlas.ti. First, all the answers to the four questions were collated under relevant themes. The researcher then reread all the responses under their new headings and created a short summary of the group's responses, on a new word document. Relevant and important quotes from students, which supported or were contrary to the group's consensus, were highlighted and cut and pasted onto the new word document. All the information was then reordered under their new theme.

3.7 ETHICAL CONSIDERATIONS CAPE

3.7.1 Prior to conducting the study

Before the study commenced, the researcher should seek the college or university's approval from the relevant authority (Cresswell, 2014). For this study, ethical clearance was sought and obtained from the university's Humanities and Social Sciences Research Ethics Committee and all relevant stakeholders involved in the study, before the study started.

3.7.2 Beginning of the study

According to Cresswell (2014), participants must be informed about the purpose of the study, inform participants that consent is required but they would not be pressured to sign the consent. Further to that, they may withdraw from the study at

any time. Before the focus group interviews commenced, the purpose of the study was discussed with the participants as well as how the information would be used. Consent was obtained from participants by way of a consent form which was explained to the participants. All participants duly completed and signed the consent form. Furthermore, it was explained that their participation in the focus group interviews was completely voluntary. Participants were informed that they could withdraw their consent at any time.

3.7.3 Collecting data

During the study, all participants should be treated in the same manner (Cresswell, 2014). Further to this, researchers should also avoid collecting harmful data and deceiving participants (Cresswell, 2014). During the interview, all participants were treated with respect. The researcher was transparent and did not deceive the participants.

3.7.4 Analysing data

All participants' privacy and anonymity should be respected and fictitious names should be used in order to protect their privacy (Cresswell, 2014). The researcher assigned all participants pseudo names in order to protect their privacy. Personal or sensitive information was kept confidential and all results were presented in aggregate form, thus, information linking an individual was avoided. All perspectives should be reported and not just positive responses (Cresswell, 2014).

3.7.5 Storing data

All data and other materials should be stored in an appropriate and ethical manner (Cresswell, 2014). All data and material will be stored for five years.

3.8 VALIDITY AND RELIABILITY

Validity and reliability was ensured through triangulation of data (Cresswell, 2014). Data were collected through multiple sources and included the results from one way focus group interviews and descriptive statistics. Some of the strategies used in order to establish validity and reliability was to triangulate the data,

relying on a more experienced researcher to review the data and the final product to ensure an accurate account has been reported by the researcher.

3.9 CONCLUDING SUMMARY

This chapter detailed and provided a rationale for the decisions made in this study. The research approach and research methods were explained, and an extensive discussion of the data collection methods was presented. The next chapter presents the results from the data collected.



CHAPTER 4

PRESENTATION OF QUANTITATIVE RESULTS

4.1 INTRODUCTION

This chapter will discuss the results from the quantitative study. The quantitative study included descriptive statistics.

4.2 RESULTS FROM DESCRIPTIVE STATISTICS

In this section, the descriptive statistical findings are presented. The following section will give an account of the student profile in the B. Com Accounting degree. This will be done per cohort. Student demographics, such as race, gender, and total number of students registered, average marks per year level and throughput rate will be indicated. The researcher plans to establish the differences in average final marks per year level for each cohort, differing throughput per year and graduation rates for each cohort.

4.2.1 Comparison of graduation rates: Cohort 1 and 2

In this study, the researcher focused on graduation rates as a measure of success within the B. Com Accounting degree. Specifically, the research only focused on graduation rates within the minimum prescribed time. For the mainstream strand, the minimum prescribed time is 3 years and for the Extended curriculum programme it is 4 years. Below follows a comparison of graduation rates between cohort 1 and cohort 2; and between cohort 3 and cohort 4.

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As alluded to earlier, cohort 1 and cohort 2 are mainstream students. Cohort 1 is students who completed Grade 12 Accounting and cohort 2 are students who did not complete Grade 12 Accounting.

First, Table 4.1 shows that in 2017, cohort 1 (114 students) was nearly three times bigger than the size of cohort 2 (35 students). In addition, the 2017 pass rate in cohort 1 was 21 percentage points above pass rate in cohort 2. Cohort 2 had a

higher pass rate in 2018 but the difference between the cohorts was smaller (7 percentage points). However, in 2019, cohort 1 again had a higher pass rate than cohort 2 (21 percentage points). For the remainder of this section, only students who were counted as part of the throughput number will be included for the analysis.

In Table 4.1, in cohort 1 the differences between the number of passes (in 2017) and student size (in 2018) can be explained as follows: In general, some students passed the accounting modules and ceased their studies in the following year. For first year specifically, the second semester Accounting module has a 55% requirement before the students can continue with the second-year B. Com Accounting studies. Thus, students may have obtained the required pass mark of 50% but not the required 55% to continue with second year B. Com Accounting. Thus, the number of students passed was 87, however, only 84 students met the 55% requirement and continued with second year B. Com Accounting.

Table 4.1: Class size and throughput statistics – cohort 1 and 2

	Cohort 1					
	2017	2018	2019	Graduands		
Student size	114	84	66			
Passes	87	66	43			
Pass rate (%)	76	77	65			
Throughput number	84	66	43	43		
Throughput rate (%)	74	77	65			
		Cohort 2				
	2017	2018	2019	Graduands		
Student size	35	19	16			
Passes	19	16	7			
Pass rate (%)	54	84	44			
Throughput number	19	16	7	7		
Throughput rate (%)	54	84	44			
Pass rate difference						
(percentage points)	21	-7	21			

Table 4.2 shows that the male share has always been more dominant in cohort 1, but it also shows a slight downward trend over time. On the contrary, while the

male share was more dominant in 2017 and 2018, it was exactly 50% in 2019, and the female share was much more dominant (86%) when examining the graduates in cohort 2. With regard to race, the results in the table clearly indicate that the Black share has always been dominant, ranging from as low as 75% (2017 in cohort 1) to as high as 100% (2019 and graduands, in cohort 2).

Table 4.2: Demographic characteristics of the throughput students in each year by cohort (%) – cohort 1 and 2

			Cohort1			Cohort2			
	2017	2018	2019	Graduands	2017	2018	2019	Graduands	
Male	61	60	59	56	69	53	50	14	
Female	39	40	41	44	31	47	50	86	
	100	100	100	100	100	100	100	100	
Black	75	83	85	86	91	95	100	100	
Coloured	24	16	14	13	6	5	0	0	
Other	1	1	_1	1	3	0	0	0	
	100	100	100	100	100	100	100	100	

Table 4.3 shows that about two-thirds of cohort 1 students enrolled for English first additional language in Grade 12, whereas a very high proportion of cohort 2 students enrolled for this subject. In addition, most of the students obtained 60-79% and above in Grade 12 English, regardless of whether they enrolled for it as home language or first additional language. Table 4.3 also shows that over the years, about a quarter of cohort 1 students enjoyed at least 80 marks in Grade 12 Mathematics, while above 46% obtained 70-79 marks. Moving on to cohort 2, it is interesting to see that the share represented by the 80-100 marks category increased over the years (2017: 37%; graduands: 71%), that is, the students with stronger Grade 12 Mathematics performance were more likely to survive the UWC Accounting studies to proceed to a higher level and eventually graduated. Over the years, the share represented by those who obtained 80-100 marks in Grade 12 Accounting increased (2017: 60%, graduands: 74%). In other words, those with strong Accounting performance in Grade 12 were more likely to be the students who passed the UWC Accounting modules across all levels and graduated successfully.

The last few rows of the table show that 45% of cohort 1 students enjoyed APS scores between 45 – 49 points and 40% obtained 50 points and above. Moving on to cohort 2, it is interesting to note that 63% of students obtained an APS score of 50 points and above. In cohort 1, it is interesting to note that the 49% of graduands had an APS score of 50 points and above, while 44% of graduands had an APS score of 45-49 points. In cohort 2, 57% of graduands had an APS score of 50 points and above and the remaining 43% had an APS score between 45-49 points.

Table 4.3: Grade 12 characteristics in each year by cohort (%) – cohort 1 and 2

		(Cohort1			C	ohort2	
	2017	2018	2019	Graduands	2017	2018	2019	Graduands
Grade 12 English								
Home language	38	31	33	35	11	5	0	0
First additional	62	69	67	65	89	95	100	100
language	100	100	100	100	100	100	100	100
Grade 12 English			100	100	100	100	100	100
Below 40 marks	0	0	0	0	0	0	0	0
40–49 marks	0	0	0	0	0	0	0	0
50–59 marks	7	NIV ₆	R316	Y of the 9	3	0	0	0
60–69 marks	34	UE \$ 301	32	GAPE 28	43	37	38	29
70–79 marks	44	48	48	49	46	53	50	43
80–100 marks	15	16	14	14	9	10	12	28
00-100 marks	100	100	100	100	100	100	100	100
Grade 12 Mathem			100	100	100	100	100	100
Below 40 marks	0	0	0	0	0	0	0	0
40–49 marks	0	0	0	0	0	0	0	0
50–59 marks	8	5	5	7	0	0	0	0
60–69 marks	25	24	23	21	6	0	0	0
70–79 marks	46	45	47	49	57	42	31	29
80–100 marks	22	26	26	23	37	58	69	71
	100	100	100	100	100	100	100	100
Grade 12 Accoun	ting fina	l mark						
Below 40 marks	0	0	0	0				
40–49 marks	0	0	0	0	N/A			
50–59 marks	4	0	0	0				
60–69 marks	9	1	2	0				
70–79 marks	28	29	27	26				
80–100 marks	60	70	71	74				

	100	100	100	100				
UWC Admission	Point Sy	ystem (Al	<u>PS)</u>					
Below 35 points	0	0	0	0	0	0	0	0
35–39 points	4	0	0	0	0	0	0	0
40–44 points	11	6	6	7	17	5	0	0
45–49 points	45	45	42	44	34	32	37	43
50 points or above	40	49	52	49	63	63	63	57
	100	100	100	100	100	100	100	100

The results in Table 4.4 in the Appendix focus on students' average academic performance at each level – 2017, 2018 and 2019. The results in the table suggest that for cohort1 performed relatively better compared with cohort 2, as they enjoyed a slightly higher mean (in 2017 and 2018). In 2019, cohort 2 outperformed cohort 1 by two percentage points. A higher proportion of cohort 1 students fell under the higher mark categories throughout the three-year period. For cohort 2 students, it is shocking that none of them obtained at least 70 marks in 2018 and 2019, but most of them were clustered in the 50-59, and 60-69 marks category.

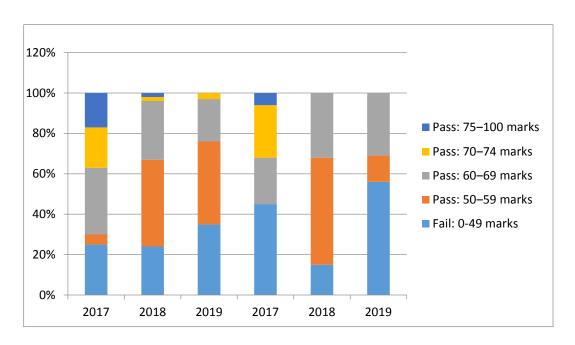
The last few rows of Table 4.4 and Figure 1 once again show that cohort1 students performed slightly better in the final mark. Particularly, more than 20% of the students from this cohort obtained a distinction (at least 75%) in 2017 (first-year) and 2019 (third-year or final year of their studies). On the contrary, none of the students from cohort 2 obtained at least 70% in their final mark.

Table 4.4: Undergraduate average final mark in each year by cohort (%)—cohort 1 and 2

	Cohort 1			Cohort 2			
Average Final							
<u>mark</u>	2017	2018	2019	2017	2018	2019	
Fail: 0-49 marks	25	24	35	45	15	56	
Pass: 50–59							
marks	5	43	41	0	53	13	
Pass: 60–69							
marks	33	29	21	23	32	31	
Pass: 70–74						·	
marks	20	2	3	26	0	0	

Pass: 75–100 marks	17	2	0	6	0	0
Mean marks	70	59	58	69	58	60
Pass rate (%)	74	77	65	54	84	44

Figure 4.1: Undergraduate average final mark in each year by cohort (%) – cohort 1 and 2



The proportions of students who enrolled in 2017 and graduated are presented in Table 4.5 These proportions were calculated by dividing the number of graduands by the number of students enrolled in 2017, for each cohort. First, the results in the table indicate that females (43%) slightly outperformed males (34%) in cohort 1, whereas females were much more than males (55% versus 4%) in cohort 2.

Table 4.5: Proportion of students from 2017 who graduated (%) at the end of 2019 by demographic and Matric characteristics – cohort 1 and 2

		Cohort1	Cohort2
Graduation 1	rate (within minimum time)	38	20
Gender	Male	34	4
	Female	43	55

Race	Black	44	22
	Coloured	18	0
	Other	100	0
Grade 12	English Home	35	0
English			
subject	English 1st additional	39	23
Grade 12	50–59 marks	50	0
English final	60–69 marks	30	13
mark	70–79 marks	42	19
	80–100 marks	35	67
Grade 12	50–59 marks	33	N/A
Maths final	60–69 marks	32	0
mark	70–79 marks	40	10
	80–100 marks	40	38
Grade 12	50–59 marks	0	N/A
Accounting	60–69 marks	0	N/A
final mark	70–79 marks	34	N/A
	80–100 marks	47	N/A
	35–39 points	0	N/A
UWC's	40–44 points	25	0
Admission	45-49 points	37	25
Points system	50 points or above	46	24

Most of the students in both cohort1 (62%) and cohort 2 (89%) are English first additional language speakers. Table 4.5 shows that none of the English home language speakers in cohort 2 graduated within minimum time, whereas 36% of students in cohort1 graduated on time. Again, the English first additional language speakers in cohort1 outperformed their peers in cohort 2, with a graduate rate of 39% as opposed to a graduate rate of 23% for cohort 2. With regards to the achievement in Grade 12 English, Table 4.5 shows that cohort1 outperformed cohort 2 when marks between 50-59, 60-69 and 70-79 are compared. However, when performances are measured using the 80-100 marks category, cohort 2 somehow outperformed cohort1, with a 67% graduate rate compared to cohort1's 35% graduate rate.

There is also a slight difference in the graduate rate between students who obtained 50-59 marks and 60-69 marks. A higher graduation rate is noted for students with an achievement between 70-79 marks and 80-100 marks for Grade 12 Mathematics. It was observed in the Grade 12 Mathematics achievement for

cohort 2, that none of the students who obtained 60-69 marks for Matric Mathematics graduated within minimum time. Only 10% of students who obtained 70-79 marks and 39% of students who obtained 80-100 marks graduated within 3 years. We can deduce that the higher the Matric Mathematics mark, the better the odds of the student graduating within the minimum 3 years.

With reference to the Grade 12 Accounting marks, only students who obtained marks between 70-79 and 80-100 for Grade 12 Accounting graduated on time, whereas none of the students who obtained a mark between 50- 59 and 60-69 graduated within 3 years. Similarly, as we observed with Grade 12 Mathematics, students who obtained a better grade in Grade 12 Accounting had a better graduation rate and we can conclude that the higher the Grade 12 Accounting marks, the better the chances of students graduating on time.

Table 4.5 shows that cohort 1 outperformed cohort 2 in UWC's APS points' category 40-44 points, 45-49 points and 50 and above points. In cohort 1, it is interesting to note that the higher the points achieved the higher proportion of students graduated within minimum time. As was observed with Grade 12 Accounting and Grade 12 Mathematics, students who obtained better Grade 12 averages and UWC APS points, had a better graduation rate and it may be concluded that the higher the UWC APS points, the better the chances of students graduating on time.

Looking at other results in Table 4.5, cohort1 significantly outperformed cohort 2 overall; the total throughput for cohort1 was 38% and for cohort 2 it is 20%, as shown in the second row of the table. Whilst not shown in the table, the average final mark, over the course of the undergraduate degree, for both cohort1 and cohort 2 was 62%. Cohort 2, however, outperformed cohort1 in the final year pass rate (60% vs 58%). From the data and results above, it may be asserted that students who enrolled in the B. Com Accounting 3 year programme with Grade 12 Accounting performed much better than the students without Grade 12 Accounting, in the undergraduate degree.

4.2.2 Comparison of graduation rates: Cohort 3 and 4

As alluded to earlier, cohort 3 and cohort 4 are Extended Curriculum Programme students. Cohort 3 students completed Grade 12 Accounting and Cohort 4 students did not complete Grade 12 Accounting.

First, Table 4.6 shows that in 2016, cohort 3 (104 students) was nearly fifteen times bigger than the size of cohort 4 (7 students). In addition, the 2016 pass rate for cohort 3 was 15 percentage points above pass rate in cohort 4. Conversely, in 2017 and 2018, cohort 4 had a higher percentage pass rate than cohort 3 (13 and 7 percentage points respectively). In 2019, as in 2016, cohort 3 had a slightly higher pass rate percentage than cohort 4 (4 percentage points).

In Table 4.6, in cohort 3 the differences between the number of passes (in 2017) and student size (in 2018) can be explained as follows: In general, some students passed the Accounting modules and ceased their studies in the following year. For first year specifically, the second semester Accounting module has a 55% requirement before the students can continue with the second year B. Com Accounting studies. Thus, students may have obtained the required pass mark of 50% but not the required 55% to continue with second year B. Com Accounting. Thus, the number of students passed was 65, however, only 60 students met the 55% requirement and continued with second year B. Com Accounting.

Table 4.6: Class size and throughput statistics – cohort 3 and 4

			C	ohort 3	
	2016	2017	2018	2019	Graduands
Student size	104	89	60	41	
Passes	89	65	41	29	
Pass rate (%)	86	73	68	71	
Throughput number	89	60	41	29	29
Throughput rate (%)	86	67	68	71	
			C	ohort 4	
	2016	2017	2018	2019	Graduands
Student size	7	5	4	3	
Passes	5	4	3	2	
Pass rate (%)	71	80	75	67	
Throughput number	5	4	3	2	2
Throughput rate (%)	71	80	75	67	

Pass rate difference					
(percentage points)	15	-13	-7	4	

Table 4.7 shows that the female share has always been more dominant in cohort 3 and cohort 4 throughout the period under review. Regarding race, the results in the table indicate that the coloured share has always been dominant, ranging from as low as 59% (2016 in cohort 3) to as high as 100% (graduands in cohort 4).

Table 4.7: Demographic characteristics of the throughput students in each year by cohort (%) – cohort 3 and 4

			Col	ort 3	
	2016	2017	2018	2019	Graduands
Male	41	39	35	32	34
Female	59	61	65	68	66
	100	100	100	100	100
Black	39	38	38	37	38
Coloured	59	60	60	61	59
Other	2	2	2	2	3
	100	100	100	100	100
			Col	ort 4	
	2016	2017	2018	2019	Graduands
Male	14	0	0	0	0
Female	86	100	100	100	100
	100	100	100	100	100
Black	43	20	25	33	0
Coloured	57	80	75	67	100
Other	0	0	0	0	0
	100	100	100	100	100

Table 4.8 shows that about two-thirds of cohort3 students enrolled for English home language in Grade 12, whereas a slightly higher proportion (71%) of cohort 4 students enrolled for this subject. In addition, the table shows most of the students obtained 60-69 and 70-79 marks in Grade 12 English, regardless of whether they enrolled for it as home language or first additional language. Table 4.8 also shows that over the years, about a half of cohort 3 students enjoyed at least 50-59 marks in Matric Mathematics, while above 45% obtained 40-49 marks. It is interesting to note that the 50-59 marks category has increased to

about two thirds in the graduands category. Moving on to cohort 4, interestingly, 86% of students obtained 50-59 marks in Grade 12 Mathematics. This share represented by the 50-59 marks category increased over the years (2016: 86%; graduands: 100%) and none of the students who obtained 60-69 marks in Grade 12 graduated. Hence, the students with stronger Matric Mathematics performance were not more likely to survive the UWC Accounting studies to proceed to a higher level and eventually graduate.

Over the years, the share represented by those who obtained 70-79 and 80-100 marks in Matric Accounting increased (2016: 43%, graduands: 62%). In cohort 3, 83% of students who obtained 60 marks and above in Grade 12 Accounting graduated within minimum time. In other words, those with strong Accounting performance in Grade 12 were more likely to pass the UWC Accounting modules across all levels and graduate successfully.

The last few rows of the table show that in cohort 3, over the years, the share of those who obtained 40-44 points, 45-49 points and 50 points and above increased and represented 75% of graduands. Moving to cohort 4, only those who obtained 45-49 points graduated within minimum time. Hence, it may be deduced that the higher the entry points, the more likely the student is to graduate within minimum time.

Table 4.8: Grade 12 characteristics in each year by cohort (%) – cohort 3 and 4

		Cohort 3				
	2016	2017	2018	2019	Graduands	
Grade 12 English						
Home language	66	67	70	76	69	
First additional						
language	34	33	30	24	31	
	100	100	100	100	100	
Grade 12 English fi	nal mark					
Below 40 marks	0	0	0	0	0	
40–49 marks	3	3	2	2	3	
50–59 marks	8	4	2	0	0	
60–69 marks	43	44	45	41	34	
70–79 marks	38	40	45	51	59	

80–100 marks	9	8	7	5	3	
OU TOO MAINS	100	100	100	100	100	
Grade 12 Mathematics final mark						
Below 40 marks	0	0	0	0	0	
40–49 marks	45	39	33	29	28	
50–59 marks	49	54	62	66	66	
60–69 marks	6	7	5	5	7	
70–79 marks	0	0	0	0	0	
80–100 marks	0	0	0	0	0	
	100	100	100	100	100	
Grade 12 Accounting	ng final ma	<u>rk</u>				
Below 40 marks	1	1	2	2	3	
40–49 marks	1	1	0	0	0	
50–59 marks	26	20	18	17	14	
60–69 marks	29	29	28	22	21	
70–79 marks	30	35	38	44	48	
80–100 marks	13	13	13	15	14	
	100	100	100	100	100	
UWC Admission Po	oint Systen	n (APS)				
Below 35 points	10	9	5	5	0	
35–39 points	36	29	27	20	24	
40–44 points	37	40	47	51	55	
45–49 points	14	17	17	20	14	
50 points or above	4	4	5	5	7	
	100	100	100	100	100	
				ohort 4		
G 1 10 F 11 1	2016	2017	2018	2019	Graduands	
Grade 12 English		0.0	I		100	
Home language	71	80	75	67	100	
First additional	20	20	25	22	0	
language	29	20	25	33	0	
Crada 12 English fi	100	100	100	100	100	
Grade 12 English fir Below 40 marks	0	0	0	0	0	
40–49 marks	0	0	0	0	0	
50–59 marks	0	0	0	0	0	
60–69 marks					0	
00–09 marks	1.4	20.1			U	
70. 70 marks	14	20	100	100		
70–79 marks	86	80	100	100	100	
70–79 marks 80–100 marks	86	80	100	100	100	
80–100 marks	86 0 100	80 0 100	100	100	100	
80–100 marks Grade 12 Mathemat	86 0 100 ics final m	80 0 100 ark	100 0 100	100 0 100	100 0 100	
80–100 marks Grade 12 Mathemat Below 40 marks	86 0 100 ics final m	80 0 100 aark 0	100 0 100	100 0 100	100 0 100	
80–100 marks Grade 12 Mathemat Below 40 marks 40–49 marks	86 0 100 ics final m 0	80 0 100 ark 0	100 0 100	100 0 100 0	100 0 100 0 0	
Grade 12 Mathemat Below 40 marks 40–49 marks 50–59 marks	86 0 100 ics final m 0 0	80 0 100 ark 0 0 80	100 0 100 0 0 0 75	100 0 100 0 0 0 67	100 0 100 0 0 100	
80–100 marks Grade 12 Mathemat Below 40 marks 40–49 marks	86 0 100 ics final m 0	80 0 100 ark 0	100 0 100	100 0 100 0	100 0 100 0	

80–100 marks	0	0	0	0	0
	100	100	100	100	100
Grade 12 Accounting	ng final ma	ırk			
Below 40 marks					
40–49 marks					
50–59 marks	N/A				
60–69 marks					
70–79 marks					
80–100 marks					
UWC Admission Po	oint Syster	n (APS)			
Below 35 points	0	0	0	0	0
35–39 points	29	40	25	0	0
40–44 points	43	20	25	33	0
45–49 points	29	40	50	67	100
50 points or above	0	0	0	0	0
	100	100	100	100	100

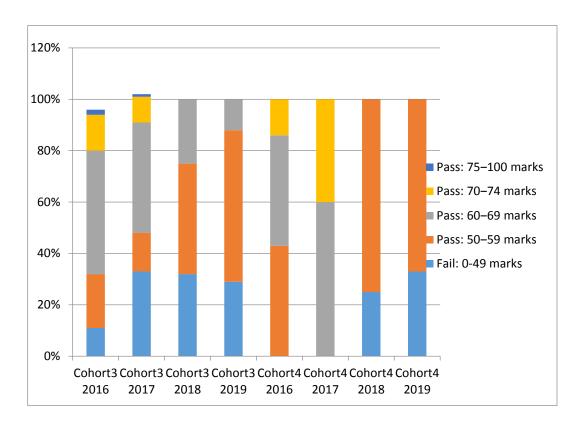
The results in Table 4.9 in the Appendix focus on students' average academic performance at each level – 2016, 2017, 2018 and 2019. The results in the table suggest that cohort 3 performed relatively better compared with cohort 4, as they enjoyed a slightly higher mean (in 2016, 2018 and 2019). In 2017, cohort 4 outperformed cohort 3 by two percentage points.

The last few rows of Table 4.9 and Figure 2 once again show that cohort 3 students performed slightly better in the final mark. In particular, students from this cohort obtained a distinction (at least 75%) in 2016 (first year) and 2017 (second year). On the contrary, none of the students from cohort 2 obtained at least 75% in their final mark. Both cohort 3 and cohort 4 students obtained 70-74 marks categories in their first and second year only. For the latter part of their studies, cohort 3 students were clustered in the 50-59, and 60-69 marks category. On the other hand, none of the cohort 4 students obtained at least 60-69 marks in their final year; the majority of them were clustered in the 50-59 marks category.

Table 4.9: Undergraduate average final mark in each year by cohort (%) – cohort 3 and 4 $\,$

	Cohort 3			Cohort 4				
Average Final mark	2016	2017	2018	2019	2016	2017	2018	2019
Fail: 0-49 marks	11	33	32	29	0	0	25	33
Pass: 50–59 marks	21	15	43	59	43	0	75	67
Pass: 60–69 marks	48	43	25	12	43	60	0	0
Pass: 70–74 marks	14	10	0	0	14	40	0	0
Pass: 75–100 marks	2	1	0	0	0	0	0	0
Mean marks	64	64	57	56	63	66	50	51
Pass rate (%)	86	67	68	71	71	80	75	67

Figure 4.2: Undergraduate average final mark in each year by cohort (%) – cohort 3 and 4 $\,$



The proportions of students who enrolled in 2016 and graduated within minimum time are presented in Table 4.10. These proportions were calculated by dividing the number of graduands by the number of students enrolled in 2016, for each cohort. First, the results in the table indicate that females (31%) slightly outperformed males (23%) in cohort 3, and similarly in cohort 4, more females graduated than males (33% versus 0%).

Table 4.10: Proportion of students from 2016 who graduated (%) at the end of 2019 by demographic and Grade 12 characteristics – cohort 3 and 4

		Cohort3	Cohort4
Graduation rate (within minimum time)		28	29
Gender	Male	23	0
	Female	31	33
Race	Black	27	0
	Coloured	28	50
	Other	50	0
Grade 12	English Home	29	40
English			
subject	English 1st additional	26	0
	40–49 marks	33	N/A
Grade 12	50–59 marks	0	N/A
English final	60–69 marks	22	0
mark	70–79 marks	44	33
	80–100 marks	11	N/A
	40–49 marks	1	N/A
Grade 12	50–59 marks	37	33
Maths final	60–69 marks	33	0
mark	70–79 marks	N/A	N/A
	80–100 marks	N/A	N/A
	Below 40 marks	100	N/A
	40–49 marks	0	N/A

Grade 12	50–59 marks	15	N/A
Accounting	60–69 marks	20	N/A
final mark	70–79 marks	45	N/A
	80–100 marks	29	N/A
	Below 35 points	0	N/A
	35–39 points	19	0
	40–44 points	42	0
UWC's			
Admission	45-49 points	27	100
Points system	50 points or above	50	0

Most of the students in both cohort 3 (66%) and cohort 4 (71%) are English Home language speakers. Table 4.10 shows that 29% of English home language speakers in cohort 3, who slightly outperformed English first additional language speakers (26%), graduated within minimum time. In cohort 4, 40% of English home language speakers graduated within minimum time whereas none of the English first additional language speakers graduated within minimum time. As noted above, English home language speakers in cohort 4 outperformed their peers in cohort 3, with a graduation rate of 40% as opposed to a graduation rate of 26% for cohort 3. Regarding the achievement in Grade 12 English, Table 4.10 shows that cohort 3 outperformed cohort 4 when marks between 60-69 and 70-79 are compared. It is interesting to note that in cohort 3 there was a 44% graduation rate for students who obtained between 70-79 marks in Grade 12 English, as opposed to 33% graduation rate for their peers in cohort 4. Further to this, only 11% of students who obtained 80-100 marks for Grade 12 English (cohort 3) graduated within the minimum timeframe.

As with Grade 12 English, cohort 3 outperformed cohort 4 students in Grade 12 Mathematics, albeit a slight difference in the graduation rate between students who obtained 50-59 marks and 60-69 marks. In cohort 3, students who achieved 50-59 marks (37%) slightly outperformed students who obtained 60-69 marks

(33%). Similarly, in cohort 4, 33% of students who obtained 50-59 marks graduated within minimum time as opposed to zero students in the 60-69 marks range. From the above, it is noted that the students with lower Grade 12 Mathematics marks had better academic performances than those with higher Mathematics marks. In this instance, we cannot deduce that the higher the Matric Mathematics mark, the better the odds of the student graduating within the minimum four-year timeline.

There is a noticeable increase in graduation rate for students who achieved marks between 50-59 marks (15%), 60-69 marks (20%) and 70-79 marks (45%) in Grade 12 Accounting. Students who achieved 80-100 marks had a graduation rate of 29%. None of the students who obtained 40-49 marks graduated on time, but it is interesting to note that there was one student who obtained a Grade 12 Accounting mark below 40 and yet still graduated in the minimum timeframe. Similarly, as we observed with Matric Mathematics, students who obtained a better grade in Matric Accounting had a better graduation rate and we can conclude that the higher the Matric Accounting marks, the better the chances of students graduating on time.

Table 4.10 shows that cohort 3 outperformed the cohort 4 in all UWC's APS points' categories, except for 45-49 points category, where cohort 4 had a 100% graduation rate. In all other categories, none of the students in cohort 4 graduated within minimum timeframe. In cohort 1, it is interesting to note that 50% of students who achieved 50 points or more, 27% of students who obtained 45-49 points and 42% of students who achieved 40-44 points graduated within minimum time. Excluding the 45-49 points category, it may be deduced that the higher the points achieved the higher proportion of students graduated within minimum time. As was observed with Grade 12 Accounting, students who obtained better Grade 12 averages and UWC APS points, had a better graduation rate and it may be concluded that the higher the UWC APS points, the better the chances of students graduating on time.

Looking at other results in Table 4.10, cohort 3 significantly outperformed cohort 4 overall, except for the overall throughput rate. It is interesting though to note that the total throughput for cohort 3 was 28% but it was only 29% for cohort 4, as shown in the first row of the table. Whilst not shown in the table, the final year average final mark in cohort 3 was 56% and 51% in cohort 4. Further to this, cohort 3 outperformed cohort 4 on the final-year pass rate (71% vs 67%) in the final-year. Hence, it may be asserted that students who enrolled for the B. Com Accounting four-year programme with Grade 12 Accounting performed much better than students without Grade 12 Accounting, in the undergraduate Accounting degree.

4.3 CONCLUDING SUMMARY

The chapter presented the results of the descriptive statistics, comparing cohorts 1 and 2, and then comparing cohorts 3 and 4. The chapter began with information regarding throughput rates, demographic information, and then academic achievement of cohorts 1 and 2, and then cohorts 3 and 4. The researcher attempted to present the results as objectively as possible.

The next chapter, Chapter 5, presents the results from the focus group interviews.

CHAPTER 5

PRESENTATION OF QUALITATIVE FINDINGS

5.1 INTRODUCTION

In the previous chapter, the quantitative results were discussed. This chapter presents a detailed presentation of data from the focus group interviews. The researcher concludes this chapter with a summary of the themes and subthemes. The research study utilised focus group interviews to elicit final year students' opinions on the influence of Grade 12 Accounting, Grade 12 English, Grade 12 Mathematics, and Grade 12 overall academic performance on their academic success thus far in the B. Com Accounting degree. The following section will provide an account of the responses from the participants.

5.2 OVERVIEW OF FOCUS GROUP INTERVIEWS

The first interview began with an explanation of the purpose of the study, a promise of confidentiality, assurance that participants could withdraw at any time, and encouragement that there was no right or wrong answer to any question. Students read and signed the consent form before the interviews commenced.

For the purposes of this research, students' responses were categorised by cohort. The following pseudo names were assigned to the participants to identify responses from specific participants, cohorts and interviews:

Participants from cohort 1 - C1.A, C1.B, C1.C, C1.D, C1.E, C1.F, C1.G, C1.H, C1.I, C1.J, C1.K, C1.L, and C1.M

Participants from cohort 2 - C2.A and C2.B

Participants from cohort 3 - C3.A, C3.B and C3.C

Participants from cohort 4 - No students participated from this cohort

No participants from cohort 4 were interviewed. This was a small cohort, with 7 students in their first year and only 3 students in their final year. As alluded to earlier in Chapter 3, there were many restrictions which prevented students from participating.

Three focus group interviews were conducted, and the composition of participants is presented in the table below:

Table 5.1: Composition of focus groups

Focus Group 1	Focus Group 2	Focus Group 3
C1. A	C1.D	C1.I
C1.B	C1.E	C1.J
C1.C	C1.F	C1.K
C3.A	C1.G	C1.L
C3.B	С1.Н	C1.M
	C3.C	C2.A
		C2.B

Saturation was reached for this study. The answers across the three focus groups were generally the same and generic. Conducting further interviews would not have elucidated any new information and insights.

5.3 RESULTS FROM FOCUS GROUP INTERVIEWS

Focus group analysis has four important qualities, namely: it is systematic, verifiable, sequential, and consequential (Krueger & Casey, 2015). Systematic analysis means that the analysis process is documented and makes sense to everyone on the research team (Krueger & Casey, 2015). For the analysis to be

verifiable, it means that another researcher would be able to perform the process again and attain the same or similar findings (Krueger & Casey, 2015). The researchers suggested the following:

- Select the first question and scrutinise the first answer. If it indeed answers
 the question, label it with a specific code, which clearly describes the
 answer. (Krueger & Casey, 2015).
- Then, continue with the second and all subsequent responses and if they are the same, give it the same code. If not, give it another code (Krueger & Casey, 2015).

According to Cameron (2005), the answers from the different focus groups should be collated. It is imperative to indicate whether a sentiment was agreed by the entire group or whether it was one expressed by one participant (Kitzinger, 1995). Thereafter, the data should be sifted, highlighted and the quotes sorted (Rabiee, 2004). The last stage involves selecting the quotes from the original context and reordering them under the new and appropriate thematic content (Rabiee, 2004). The analysis of the focus group interviews was completed according to thematic analysis. The themes will be presented below followed by the analysis. The themes are presented in the table below:

Table 5.2: Theme 1: Students' perception of overall school experience

- 5.3.1.1 School culture
- 5.3.1.2 Developing resilience
- 5.3.1.3 Teachers' Accounting Pedagogical content knowledge
- 5.3.1.4 University readiness programmes
- 5.3.1.5 The influence of Accounting as a school subject
- 5.3.1.6 The influence of other high school subjects

5.3.1 Discussion and interpretation of Theme 1 and its subthemes

5.3.1.1 School culture

School culture also plays an important role in students' academic success, either positive or negative. Positive school culture appeared to play a major role in students' motivation to strive for success. Particularly, teachers who are passionate play a major role in creating a positive school culture. In this regard students lamented how teachers encouraged them to further their post school education and training. C1.B mentioned the following:

My Accounting teacher went the extra mile because especially for Accounting students because she was the one that introduced us to chartered accountancy. She said there are SAICA programmes and nobody in the school knew about it. She went to go get information on various bursaries. All we had to do was give her the documents that's needed for the bursary and then she would apply on behalf of us.

So there are the ups and downs but the teachers that help you are among us and the Math and Accounting teachers actually went the extra mile for the students and that is what made me enjoy going to school.

While another student expressed that the continuous motivation of teachers and being in a positive school environment motivated her to strive for success. C2.A said:

I'd also say they people or rather the teacher from high school who was very positive and always motivated us also played a role in me wanting to achieve better things for myself all the time.

It was interesting to note how teachers played the role of parent when one student's mother passed away when he was in Grade 10. This teacher basically motivated him to finish his schooling. C1.M said "I want to say in Grade Ten, my mother passed away but since I was having a great teacher, Maths teacher. He also motivated me up until Grade Twelve". Furthermore, this student also believes "for high school to work for you, it would be because of the teachers and the people you associate with"

A positive school culture also includes promoting the importance of high academic performance and this, according to one student, compelled her to do well academically which resulted in independent learning. C2.B said:

I would more say, in better words, I would say that good academic performance was a thing. It was praised and because of that culture I was forced to put in the work and be interested in school. If fifty per cent of the class is interested, you know, like fighting for a position. It creates a sense of independent learning even because if a teacher teaches you whatever, you have to go home and do it yourself.

Although schools are located in previously disadvantaged communities, certain schools ensured that access is given to learners based on merit by giving them a baseline test before acceptance to the school. This is what C1.B had to say:

All the surrounding schools called us the white school in the area because most of the high schools are either not there or it's children that could not accepted at Malibu because it is a Maths and Science school where your Maths mark had to be high and you had to write a test to be placed in a class coming to Malibu. You first had to be accepted and then you write a test to see in what class you are. So they take the top ten or I mean the top five and then divide them in the five English classes and then the top two Afrikaans students and put them in a class so every top student was in a class.

C1.K also alluded that discipline was heavily embedded in the school's ethos and said "They are very strict when it comes to academics. You are told you need to study every day. What you learnt in class, you need to go back, and you need to write notes when you get home".

C1.L echoed a similar sentiment and stated that discipline was strictly enforced by the school. This helped her to transition from school to university easily. She uttered:

It is the discipline from school teaching you that studying is actually important. You can't just come to university and waste your time. You are here to study. You are here to get a degree.

On the other side of the coin, some schools placed a heavy emphasis on discipline and academic performance; other schools also encouraged learners to participate in the informal curriculum. As C3.C highlighted, participating in this curriculum,

gave her the opportunity to develop holistically and cope with university life. Here is her view:

At the school, they also told us to participate in extramural activities and ever since I participated in those extramural activities, I developed holistically. It is a part of the school values to develop it's learners holistically, not only in academics. Even on university, I am involved in certain programmes. I can see it affects my schoolwork because it makes me understand things on a different level because I network with people from different walks of life. Most of the time our scenarios in our question paper and even in our classroom, our lecturers would mention things that were happening beyond our borders and with my involvement in extramural activities, it makes me understand how these things are linked to my academics and schooling. So, I think my school pushed me to reach my potential within academics through me being involved in extramural activities.

Despite gangsterism being rife in the area which some schools are located, schools still managed to motivate their learners to pursue further studies. As C1.A explains:

My high school I attended was Elsies River High and it was in an area where gangsterism was quite prevalent. It is a type of area where boys or young boys would get shot, not related to any gang because they look like someone, they thought he was so he would get shot. It was instilled in us that we had to succeed, and we had to get out of those circumstances and that is something that Elsies River High is very well known for. We have produced many Chartered Accountants and yeah. So, it is drilled into us that you have to strive for something better. You have to strive for a life that's not going to end with a bullet, and it is drilled in us. So, it helped a lot on university. B. Comm Accounting whereby your character is tested a lot when you feel like you're not going to make it and you just like, I have no choice, do or die. I am not giving up. I'm gonna have to go through with this. There is too much on this for me. So yeah, that's where it comes me for in. It installed that drive to just move forward and push, so yeah

School culture can be influenced by the broader community environment. A student elaborated how drug addiction and teenage pregnancy are prevalent in the community where his school is located. These factors pose a challenge to achieve success. C1.B said:

Okay, I came from Mannenberg high school. It was basically the bougie school in Eersteriver but as I said, it's not bougie at all. It was basically drugs around the school.

Cigarette smoking. Basically, girls getting pregnant every day and that's no lie. There is at least ten girls a year that's pregnant on the school and so that is also a challenge because it's either you become a father literally or you have to study and focus on your future.

C1.C was of the opinion that his school had no influence on his academic success and expressed: "To be honest, I can't say that my school played a role in my life like it's always been me, myself and I because, like him, coming from a township, which is dangerous".

Socio economic circumstances also play a role in students' academic success. C3.B firmly believed that parents' social status influences the knowledge and skills of their children. Further to this, learners' access to resources are stifled because of parents' social status. She complained:

I think most people think the best thing you can get in high school is exposure. A lot of people go to lower-income schools like when those type of kids, okay some other their parents are professionals and a lot of them aren't. I think you are not as exposed as someone who goes to Westerford High. Their parents are board of directors. Their parents are those charted accountants. Their parents are those doctors or whatever because I see from my sister and I see for myself and I see that type of exposure of what you want to be but you're flung into a career that you don'' really want and it's too late to turn back. It literally, influences your decision, because you did not have the exposure to what you wanted or what you liked. The career that you choose is one thing but the lack of exposure and knowing what's out there sort of affects what you can do with your life.

A student explained that she was compelled to attend schools outside of her community due to the lack of resources. Even though the school she attended was better than the school within her community, it was not necessarily the best school. C1.J uttered:

I would also say average because it was a good school because I went to a school outside of my community. The school had resources, but it wasn't the best. We had computers and all of that, but I knew there were private schools that were a thousand times better. So that's why I am saying average, definitely.

A similar view was expressed that schools that have resources and good teachers play a role in academic success. C1.K said:

I went to two different schools. The one was in a very small town and then the other one was when we moved to Paarl because there was a better school there. But both of them were pretty good in terms of resources and teachers.

One student sums it up by saying that even though it is important to have teachers that continuously motivate you, it is also up to the student to take the initiative to learn independently and be self-motivated. C1.M said, "If you have the best teachers so the teacher will educate you according to like, if you are willing to be educated".

5.3.1.2 Developing resilience

Despite students being raised and doing their schooling in communities where gang violence is rife, they still showed resilience and self-motivation to obtain university access. In this regard, C1.C said:

To be honest, I can't say that my school played a role in my life like it's always been me, myself and I because, like him, coming from a township, which is dangerous, like very dangerous. Our teachers don't motivate us at all like it is every person for themselves where I come from.

The above student (C1.C) also reflected on one teacher's advice to him in relation to survival skills in this community and expressed the following:

I remember this one time there was this one teacher who told us like, a teacher shouldn't say something like that, if you want to survive in this township you should like get along with the thugs in the area and I was like what! How can you encourage something like that?

The lack of motivation by principals was also evident in the results. In one instance, a student described a principal's lack of empathy in relation to a violent incident that occurred outside of the school, where one of the learners was involved. C1.C further elaborated:

So, my school didn't play a role at all because even the principal doesn't even care about anything happening in the school like if a child was robbed and then they'll come to school. Oh, you were robbed, okay go to class. How can he go to class? Right now, he is traumatised like he was robbed. He was almost stabbed like anything. That's the kind of school I come from.

Students were compelled to develop resilience because teachers were not adhering to the medium of instruction, which is English; in particular at schools where the mother tongue was another South African language, for example, isiZulu and isiXhosa. C1.F explained that "I learned English in Zulu, Mathematics in Zulu. Like every subject is in Zulu except for English. So, it does sometimes get tricky". Another student further related a similar experience, but to overcome this challenge, C1.C elaborated:

It was something that we had to teach ourselves like watching soapies on television or movies and everything. Then we came to varsity and it was hard for us because we were taught in isiZulu in Mathematics, Economics and Business Studies and we were taught in isiZulu. Everything was taught in isiZulu, even our English period was taught in isiZulu. We will talk isiZulu the whole period.

It was also evident that teachers played a role in assisting students in developing resilience. C3.A explained how a teacher taught her to be an independent learner and this helped her to adapt to university life. She said:

A teacher taught me how to work on my own, like on university you work on your own and don't depend on teachers too much like teachers and lecturers or anything. So, I think that's what helped me with university life.

5.3.1.3 Teachers' Accounting pedagogical content knowledge

Some mainstream students complained that teachers lacked pedagogical content knowledge. In one instance, a student explained that the basics of Accounting were not transferred correctly (taught properly). It appeared that students required a paradigm shift to understand the basics of Accounting, particularly when they transitioned from school to university. In this regard, C1.M said:

I needed to adjust because on high school because if something was purchased, it is an expense and if it is not used, you need to know it is an asset until it is used so there was that big change. I was a little bit stubborn getting it through my head, but I told myself that I needed to change.

One student was adamant that teachers were unable to adequately teach them Accounting. However, this motivated her to take charge of assisting other learners in the class to understand Accounting by tutoring them. She believed that tutoring

her peers gave her the confidence to become a self-motivated student at university. C1.I uttered:

So, for me, at school, the teachers didn't teach. I don't know if they didn't know the work, but my friends and I would tutor the class. I think that really helped me when I got here, I was already used to doing work myself. If I didn't understand what the lecturer was saying, I wasn't really phased by it because I am so used to having to grasp concepts by myself so it really helped in that matter and also the same thing with the awards.

Similarly, another student expressed the challenge of experiencing teachers "who did not teach". Nonetheless, she took the initiative to do independent learning and this played a tremendous role in her developing resilience to overcome the challenges she experienced during her university studies. C1.J postulated:

I had teachers who did not teach. So, cultivating independence thing was my thing. It really helped me a lot because I didn't know anything, any modules like the things that I was going to do here. I had to teach myself, grasp concepts all on my own.

A few examples were provided of teachers lacking pedagogical content knowledge such as the fact that teachers overloaded learners with question papers instead of teaching them in depth knowledge of processes required to understand Accounting. Two students, C1.C and C3.A expressed the following concerns:

She used to give us question papers every day like she will do this if you find something like this if you find something like this do this. Like we were cramming Accounting. I didn't know Accounting at all because I found that after four weeks here at varsity that I don't know Accounting like cramming Accounting the whole time because I remember I didn't know what expenses are. I didn't know what incomes are. I knew that it is money coming in and money going out at that point because my teacher use to be like, if you find something like this, do it like this (C1.C)

Every time its question papers, question papers. They'll be like we will start a chapter okay. We will be doing something like this today then from there onwards it's just question papers, that's all. (C1.C)

So, also in high school, we had our accounting teacher but then it's like you're on your own most of the time because the teachers are there but when you go to them, they also can't answer your questions and like they always direct you go and like study the layout and then go and find out and then came back and study. So, for me, I feel that when I was studying it was like I was left on my own. Like I would watch programmes on TV, or I

would study out of mind the gap textbooks or other textbooks. You don't really like, you go to the class but when you're in class, the teachers are talking to other students about other things and then you're just sitting there waiting like are we going to do work today or are we just going to chat for this period. So, like. Huh? (C3.A)

Term test two my mark dropped like it completely dropped. I didn't fail but it dropped from an A to something there, but I teach myself Accounting like what is accounting. I had to go and ask people what are you doing in a case like this, and this and that because my teachers just question papers every time. (C1.C)

Another example of teachers lacking pedagogical content knowledge was expressed by C1.A student who felt that he only started to understand the meaning of accounting processes when he enrolled at university. He explains:

Grade twelve Accounting taught me about accounting. It did not teach me 'What is accounting?'. I only found out in the first year, for instance, this is an example, that a balance sheet is just a vertical accounting equation. In high school, I was taught to remember the formats. I was taught to memorise. That is how far the school even taught. It teaches you to memorise rather than understand and that is where my shortfall came, and it was a big adjustment when I came to university.

C1.C felt that coming from a township school, doing Accounting was a privilege because of the low numbers of learners enrolled for the subject. He further attributes the low enrolment to poor quality teachers and elaborated the following:

I come from a township where like its few students that are good in Accounting, like a few students maybe we'll find around ten students in every high school. We have around maybe fifteen high schools in my township and ten students out of the whole township who are good in Accounting. Like, we don't have quality teachers like every township teacher say question papers, question papers.

Similar sentiments were shared by students in the extended curriculum programme. A student lamented that teachers promote rote learning, and this was a stumbling block when entering university and this is the reason why many ECP students are unable to complete the degree in the minimum time frame. C3.B said:

The thing is when you come from a place that teaches you verbatim, this is what you do. They don't teach you what if this happens, what if that happens, how you approach this. It's literally like the basics that they don't teach you. They teach you the final product but they don't teach you the understanding behind it and that's the huge discrepancy between varsity and high school is that it is unrealistic in a sense because that's not going to help

you get as high marks or whatever but when you come here... That's why a lot of us from the four-year programme, we were not here. We were like, how many in class like over two-hundred people in that class alone and compared to now.

In addition to this, C3.B further elaborated on the above sentiment and said:

Exactly! That was when we started and now there is hardly any of us here. Yes, Mr Muriro tested us very harshly but at the end of the day it's like, we tried because we went into the four-year programme to help ourselves from where we were and I think that's why I think like that in high school don't prepare you as well as they should. I mean I added on an extra year because I felt like I knew nothing. So really, it's just about how they teach you

So, I think Grade Twelve Accounting, honestly it, my high school was kind of crappy so like it influences your entire decision. My decision to do a four-year programme was based on the fact that I felt like I knew nothing, to be honest like from the get go. It doesn't matter, because, for me, they can say you got so many A's in high school but for me, it didn't count because I felt like I understood absolutely zero. So, when I came to varsity I felt like a blank piece of paper, absolutely nothing.

Two students on the mainstream programme further exposed that teachers did not adequately explain Accounting concepts to them and promoted rote learning. As C3.A uttered: "With my high school Grade Twelve, it was of structure and getting the answers onto the page so that you can pass. So, in that sense, I didn't really have an understanding". The other student gave a detailed example of how he was taught Accounting at school. C1.A postulated:

With regards to internal controls, they teach us something similar on high school and they call it internal controls. But, when we came here, we were surprised, for our surprise after the first term test, I thought okay I could just do it like I did on high school, and it did not fly. For example, on high school they teach us, literally just saying less wastage is internal control and that will not fly with the university at all. So, there is not much emphasis put on understanding it on high school but there is more emphasis on memorising and just passing. They teach us how to pass. They don't teach us how to actually understand so that's my take on it.

Due to the teachers' lack of pedagogical content knowledge, a student referred to the underutilisation of resources, such as textbooks. This could be the result of teachers' inability to unpack the exercises in the textbooks because most textbooks do not provide teachers with memorandums. Hence, the overuse of question papers because these come with memorandums. C1.A said:

At high school textbooks are heavily underutilised. We had stacks of textbooks but in class we didn't really use them. What the teacher did was they went to the board, wrote out the answers of the test. When it comes to the test time, they would give us a scope but the scope is just a blueprint of the memo and then we would literally just learn the paragraphs of the notes we wrote down and then we just copy and paste and on university was actually the time to grasp the value of textbooks. How you can really learn from textbooks but on high school they don't put the proper emphasis on textbooks. They don't utilise it properly

C3.A reflected that her teachers were unable to adequately respond to her questions. She then took the initiative to watch TV programmes related to Accounting and bought additional textbooks to facilitate her learning. She postulated:

In high school, we had our Accounting teacher but then it's like you're on your own most of the time because the teachers are there but when you go to them, they also can't answer your questions and like they always direct you go and like study the layout and then go and find out and then came back and study. So, for me, I feel that when I was studying it was like I was left on my own. Like I would watch programmes on TV, or I would study out of mind the gap textbooks or other textbooks. You don't really like, you go to the class but when you're in class, the teachers are talking to other students about other things and then you're just sitting there waiting like are we going to do work today or are we just going to chat for this period. So, like. Huh?

5.3.1.4 University readiness programmes

The results showed that there was a disjuncture between school and university expectations. In this regard, students highlighted that they were not adequately prepared for university at school level (during their schooling). For example, two students felt that the resources provided for assessment at school were not given at university. C1.C said: "like you used to get answer sheets which is something we don't get at varsity". While C3.C further elaborated:

On high school, you have an answer book and your question book but in university, you have blank pages to fill in yourself. So I feel like one of the spaces high school failed us is in making us lazy to write out all the work because they just give you a templet and fill

it in the blanks and you fill in on that particular template. But in terms of the basic knowledge, that is how it helped me with first and second year.

Further to this, two students (C3.B and C3.A) related that they were unaware of what a Chartered Accountant is and that the school never gave them much insight of different career choices. In this regard they felt confused and said:

I'll be honest. My high school didn't help me with anything at all. I feel like from the get go. Like literally, honestly, didn't know what a chartered accountant was either. I didn't know what Accounting was when I even applied for it. My first choice was Accounting, and my second choice was Law. I knew it was something to do with the law. That was my two options and I went for it. No one said this is what to do. No one helped me from my school saying this is what you need to apply for, this is what you have to do. No one helped or made sure that I was applied to a university or tell me when the closing date was. No one helped me at all with anything from high school. (C3.B)

What I can remember it's like I still didn't know what a chartered accountant was and I think I only realised that when I was in second year or something and I didn't know the road would be this long. Like I thought four years, you get your degree and then you're done but if you want to be a CA you have to do your articles. (C3.A)

Another student echoed a similar sentiment, where he took the initiative to do research on Chartered Accountancy and that the school provided no assistance in terms of career choices, C1.C said:

You had to research, do everything for yourself every time. I remember to be a CA it was my decision to make. I had to make that decision by Grade Eight because at the end of Grade Nine I knew I wanted to be a CA but it was all my research. I didn't ask any teacher.

In some cases, schools also provided no assistance with bursary applications. While this was the case, one student took it upon herself to apply for a bursary to obtain university access. C3.B uttered "I applied for bursaries and no one gave me the guidance I needed. No one helped me out. I had to figure it all out".

It is evident in the results that certain schools place a lot of emphasis on sport as opposed to preparing their learners for post-school education and training. C1.E complained:

My school was very sport orientated so everything was focused on rugby specifically. Let's just put it out there. It was a school that owned a lot of farms, so they also have a subject called Agriculture and Landbou and all of those things. That is one of the subjects that they pride themselves on, farms and land. Other than that, they did not assist us with bursaries, applying to universities. There were no career expo things, there was no people that talked or there was no people that connected with us. So, we just had to do it on our own. So, in terms of academic success, not for university.

Lastly, a few suggestions were made by C1.B who stated that university students should offer to educate learners at school level regarding degrees offered at university. These were his recommendations:

So, if first years, second years and third years go back to their high school, like on a Saturday or so to help the Accounting students. That would be a big plus for them. And, especially coming from Eersteriver, there I think only one or two in every year who goes on and studies B. Com Accounting. So not everyone knows actually what degrees or career paths also. And you also hear it once you actually go job shadowing or you know this is what you want to become one day. So, that's my take on it. (C1.B)

So, it was a big eye-opener to say that there's so much differences between tax and Accounting and yet they so similar in what we are studying and there was no back-up at high school to help us with that. So maybe incorporate basic tax knowledge at high school level in Accounting would be beneficial to helping students come up into university and make a success of it. (C1.B)

5.3.1.5 Influence of Accounting as a high school subject

There was an overwhelming positive response from cohort 1 mainstream students who did both Accounting and Mathematics at high school. These students had varied opinions of the influence of high school Accounting on their academic success and provided numerous examples of this. In this regard, a student referred to the importance of general ledger (T – accounts) that facilitates the understanding of Accounting at tertiary level. She mentioned that:

Not a particular module just the understanding. The understanding how Accounting works so that is the way high school Accounting helped me. Just understanding where everything fits. As someone else mentioned the T-Accounts, how to work out the T-Accounts, knowing what an asset is, or having an idea what assets are, what liabilities are. Not a specific module but my general understanding of Accounting. That's where it helped me. (C3.C)

Three students provided insights of how basic Accounting knowledge assisted them with first year Accounting. This is what they had to say:

I do think it did help because I had a basis of what to expect Accounting to be and yes there were something that I had to adjust to, like the definition of an asset but it didn't go completely against what everything that I have learned. It just changed it a little bit, but it really helped having the knowledge from school. (C3.C)

I don't think first year would have been the way it was if I didn't have the basis of high school Accounting. Like with the basics, if I still had to think about "is and asset increasing on the right side or the left side". So, it is things like that kind of, definitely helped. (C1.L)

Can I also say that knowing your basics helped during tests and exams because I would expect someone who didn't take Accounting to take a lot longer to answer the question, rather than you already know what all of the words mean, you just have to answer it. So, if you did do it, it was easy. I couldn't relate to people when they say they didn't finish questions because I kind of knew what was expected of me and how to answer the question. (C1.J)

In addition to the above three insights, a student communicated that high school Accounting mainly focuses on Financial Accounting as opposed to Auditing and lamented: "On high school, in my opinion, I feel Accounting is majority financial accounting and just in terms of controls, that's the part of auditing that's in there." (C1.A)

Further to this, it became evident that the Grade 12 Accounting curriculum to a certain extent aligns with the first year university Accounting module but not the second year module. In this light, two students explained:

I think that Grade Twelve helped me a little because it did look like Grade Twelve work in first year. I am in the extended programme so my first year, Grade Twelve Accounting did help me somewhat and then second year, not at all. (C3.A)

First year. I'd say first year because most of first years' work was kind of what we did in Grade Twelve already but it is just a little bit more (C1.L)

However, on the one hand, not all students agreed that Accounting played a major role in understanding university Accounting in the first year. For example, C1.B

expressed the view that school Accounting only assisted in the first three weeks of the first semester. In this regard he lamented:

It was a massive adjustment from matric Accounting to Accounting at university because I somewhat relied on my knowledge in the first three weeks of university and that's about it. That's all Accounting helped me with. It just helped me understand the terminology better. So that's where I had the upper hand against people who did not do it in high school but that's it because if you didn't do Accounting in high school, it doesn't give you that much of a deficit because, in the first three weeks, you anyways learn all the terminology that is used in Accounting.

Corroborating to a certain extent with the above sentiment, a student was of the opinion that while school Accounting was beneficial only for term one, he had to take the initiative to independently reteach himself accounting concepts and processes. C1.C said:

In relation to Financial Accounting, I had to teach myself again. It (Accounting) did help me somehow because I remember my term test one like I passed it like very well because I got an A. I remember. Like I thought okay, I thought like if you continue like this and remember the structure and everything, like you will pass.

Contrary to the above two views, a student had a different perspective of the influence of school Accounting on her university degree. C1.J felt that school Accounting did not only assist her in her first year, but also in her second and third years of university study. Here is her story:

Like in a sense, in high school you go through many possible examples, possible situations. But when I got to university, like the first semester, there wasn't really a trick that you could throw at us because we did some many examples on high school. So, for a person who probably didn't have Accounting on high school, you just learn what is said in the lecture but you don't have an overview of the basics of Accounting. So, in that sense, it really did help. And the knowledge that I acquired from high school did not just help me in terms of first year and second year, but even in third year in terms of auditing. Now when they speak of credit with reconciliations, I remember how you do that. So that also helps.

On the other hand, studying Accounting at school inspired students to pursue careers as Chartered Accountants. As C1.K said: "It helped me know what I want

because from high school, I knew what Accounting was all about so I had passion for it all the way".

It was interesting to note that one student (C2.A) highlighted that not studying Accounting at school had no influence on her university academic success up to third year level. In fact, she was of the opinion that: "For me, I don't believe in it because I didn't do Accounting in high school. So here I am, doing my final year, hopefully graduating next year so I don't believe in it".

5.3.1.6 Influence of other high school subjects

While Accounting as a school subject had a major influence on students' academic success and in reaching third year in minimum time, students also related that there were other school subjects that played a crucial role in their academic success. Subjects such as Mathematics, Economics, Business Studies, English (first and additional language), and Computer Application Technology were highlighted.

Students across all three focus group interviews were of the view that Mathematics assisted them to facilitate their understanding with modules such as Financial Accounting (first and second year), and Mathematics (first year). For example, one student said (C3.B) "I think Mathematics just, Mathematics taught me like how to think. especially for Accounting when we did a math question". In addition to this, C1.K concurred and said: "So, only the Maths part really helped". This view is also supported by C1.M, who stated that: "And for Maths, I think it helped me out for my first year and I think I am still using it now because when I was writing Math, I would always have the unknowns of X and solve the unknown" "

C1.A and C3.B further elaborated on how Mathematics assisted them and stated:

Okay but the very basic Mathematics. Even though you asked it in a much more in-depth degree because you do Mathematics in your FIA. That was more relevant to Accounting. They are basic but they are very important and that's what helped me a lot in B. Comm Accounting in first-year and second-year. (C1.A)

Yeah, we got like these extra Math modules. Like they helped me so to think back it to look at how things look or change from another perspective you know, so like in these relationships. I think that is how Math helped me. It is just to look at things and when approaching things. I think Math kind of moulded the way of thinking and the way you approach something. That's what helped me and just business in general. (C3.B)

Learning Mathematics at school made modules such as Business Statistics easy to do, and C1.C agreed with his fellow peers when relaying that: "it was Mathematics as he said like business statistics was easy for me like because like I loved Mathematics in high school". Three students shared a similar view and said:

Maths helped me with MAM126 but that was in first year only and was only relevant up until at the end of that year. I guess Maths helped with stats as well. MAM126 and stats but after that, it is just one of those prerequisites. Like something you just now know like in hindsight. (C1.D)

For me, I think it was only MAM126 during first year. It was only Maths that helped. I can't think of anything else because I did Physics and Life Science so it was just Maths for MAM126 and that was it. (C2.A)

Also for me, it was Mathematics because I did pure Maths and pure Science so but in first year it did help with MAM126 and in second and third year, you still use the basics of Maths, calculating the unknown, things like that. So, Mathematics, in first, second and third year, it's the one that helped me. (C1.I)

C1.J further added that: "I don't think I would be able to think the way I think in MAC if I didn't have Maths, pure Maths because it requires a certain type of thinking." In agreement with the previous view, C1.L expressed that Mathematics aided her in her second and third year of study:

Also, the way of thinking that you use in Maths. Like they all said. Solving unknowns in first year Accounting helped and also MAC (Management Accounting) and Accounting in second year and it still helps in third year when you have to calculate cost of sales or you have to find this and you have to find that. You can still apply that knowledge and, also, is it relevant to other modules in first year. Like ALC and all of that.

English as a school subject appears to give students the ability to comprehend. As C3.A expressed "For me, it will be English also. Like English really helped, I feel because of the way the questions are set out and then I don't know." C1.B echoed similar sentiments and said:

So the only real thing that helped me outside of Accounting was English because of the way the English structures the questions. It makes it easier and gains understanding in a question.

For one student, English aided his cognitive ability to prepare the Accounting financial statements and to systematically interpret what was required of him. C1.B uttered:

Think carefully about what it wants from you but if it says towards an accounting equation that's basically just to do an accounting equation and then they say from your accounting equation, prepare your financial statements. Where most people don't take it like that and you just plot it exactly like it is there and do it in your financial position and that is how I approach the question because of what English taught me. So it is not just looking at one part of the required it's looking at the growing picture of the required and the structure that Accounting talks of - this is a balance sheet because they still call it a balance sheet, so this is a balance sheet and that structure. I just took it back to the accounting equation and then back from the accounting equation back to the statement of financial acquisition. So understanding was big in that.

Studying English additional language as a school subject also appeared to be helpful with social interaction with peers at university. C1.H explains:

I would just say English. There is no other one because when you come to varsity, you come from very different cultures is you have a common ground in language and how to interact with people. So, for me, I would say, Afrikaans school, not Afrikaans but most people was actually okay because I am use to speaking English because some people want to ask questions but, they want to ask you a question in their own mother tongue.

Further to this, C1.G felt that English aided her with communication and writing skills. She said: "So I would also agree with some of my colleagues that like its English because it helped me with regards to communication and with regard to creative writing."

Studying English as a subject at school assisted students to comprehend what is required from them at university, such as doing class activities and assessments. As C1.B uttered "So when you're reading what is required of you at university, your English knowledge backs that up because you have to identify what the question really wants from you."

Meanwhile, schools also played a role in encouraging learners to read with the aim to develop their literacy skills. C1.D explains:

English because you have to speak the language and actually read. My school put a lot of emphasis on reading so as the years go by, you realise that question become longer especially in Math and Auditing. Like I would be so lazy to read but I am programmed to read for such a long time is it's a bit easier. So, English helped in that aspect.

It was evident in the results that commercial subjects such as Economics and Business Studies, gave students the advantage to engage more meaningfully with modules that had a business underpinning. For example, C3.A stated that she was passionate about Economics at school and it helped her in her second year and said: "When I read the question I thought of Economics because I loved Economics on high school and that came in second-year." C1.M further expanded on the aforementioned view by stating: "We were doing Economics in first year so I didn't even struggle with Economics because I knew that my Economics was perfect for my high school"

One student linked Business Studies with Auditing (second year) and explained how different concepts such as "business risks" facilitated his understanding of this module. C1.C said:

For me, I think it is a Business Studies. Like last year second year with Auditing mostly because I remember the questions like identify the business risk. In Business Studies in high school, we use to learn things like certain factors and swot analysis and everything like that.

Another student corroborated the above view that Business Studies assisted with Auditing and that the knowledge obtained at high school is beneficial. C2.B uttered:

Then in second year, I'd say Business Studies also helped with Auditing and even now because I know the relevant laws and regulations that I had learnt in high school. I am able to comment when I am supposed to comment in terms of the laws that are contravened in Auditing and even Managerial Accounting when there is a discussion question. I am able to comment based on my high school knowledge.

This sentiment was further supported by C1.J who expressed:

Even with Business Studies helped a lot with Auditing because Auditing is so much theory but I was used to it in high school. You know, like having to learn paragraphs and

paragraphs of things. Some of the content in Business Studies came through in Auditing like the Companies Act and all of that because we did it in Business Studies.

Evident in the results was that Business Studies did not only assist students in Auditing, but also Management Accounting and in this regard C1.M said:

So, to me, Business Studies helped in Management Accounting and now it is helping me in Auditing because we did the basics and for Management Accounting in second year.

Business studies were also helpful with modules such as Information Systems and Management (first year) as C3.B said "I think that Business Studies helped me with regards to management as well as IFS in my first year". Business studies and Accounting, according to C3.C, was interrelated at school and, also now at university. She firmly believes that these two school subjects helped with her academic success and postulated that:

So, we have the science stream, commercial stream and a general stream. So within the commercial stream, the compulsory subjects would be Accounting with Business Studies and for me the two of them linked pretty well and even further on in my degree I saw how the business and accounting things are connected. So, Business Studies helped me a lot in first year and to tread even further,

Interestingly, so many students highlighted that Computer Application Technology (CAT), also played a major role in the B. Com Accounting degree. According to C3.C and C1.H, being familiar with the Microsoft software packages enabled them to apply the knowledge they obtained in high school to different university modules. They expressed:

I did a subject called Computer Application Technology which is short for CAT and that also helped me further along with my degree like understanding how to work with Word or Excel. So those would be the two subjects that helped me. (C3.C)

Yeah because like in most of my class works, the solution would be in Excel and then you just see and amount you're wondering where it comes from. So, you need to click the cell and then you will see the reference and then you had to go back. So, it is quite easy for us who did CAT because you are comfortable in using your Excel. (C1.H)

The knowledge and skills obtained studying Computer Application Technology at school was also beneficial in the students' second year. This was confirmed by C1.L who stated that:

For me, I did CAT at school which is computer application technology and that really helped with Accounting in second year because we used excel and I was used to doing the formulas, v-lookups so that really helped.

To conclude this sub theme, C2.B who did commercial subjects, expressed that all these subjects were beneficial, particularly in her first year of university study. She said:

So, I'd say first year, all my high school modules helped me to be successful in first year because almost Economics from high school, and Management 131 which was Business Studies in high school.

5.3.2 Discussion and interpretation of Theme 2 and its subthemes

Table 5.3: Theme 2 - Students' perceptions of overall university experience

5.3.2.1 First year experience

5.3.2.2 Second year experience

5.3.2.3 Third year experience

5.3.2.1 First year experience

Students narrated their first-year experiences in relation to English as a language barrier, university readiness programme, the influence of Accounting, and the impact of teachers' lack of pedagogical knowledge.

English as a language barrier

In the context of this study, not all students are English home language speakers. When the question was posed if the language of instruction was an impediment to their academic success, students had mixed views.

Students, whose home language is English, appeared to have little to no challenges with the language of instruction. In fact, one student believed that his vocabulary expanded at university. In this regard, C1.A said:

English is my home language so, if anything, it actually improved because it expanded my vocabulary. I have been using words like 'subsequent' and 'preceding' now and I didn't use it before I came to UWC. The English actually expanded my vocabulary but when I started obviously the terminology, for someone who isn't a business student, I also had to learn some terms and things like that but language as a whole wasn't an impediment to me.

On the other side of the coin, students whose home language is not English, had many challenges which stemmed from school and remained an obstacle when they accessed university. One challenge that was quite evident was that while the medium of instruction at so called Black schools is English, teachers taught learners in their mother tongue. C1.C contextualised it as follows:

To be honest ma'am, English to us to people like me and my friends, okay I'll talk on my behalf and my friends. Coming from KZN, our first language is isiZulu isiXhosa and everything. For us, we come from a school where we learnt English in isiZulu. Like a question like what is a noun would be asked like (speaks isiZulu). Like what is a noun but it would be asked in isiZulu and even when you answered you had to answer in isiZulu like in other subjects. (inaudible) in isiZulu. We didn't understand what English was.

On the one hand, English as the medium of instruction can be an impediment to students' success at university. Three English second language speakers recalled their difficulties in adjusting to the language of instruction at university. They said their difficulties stemmed from the fact that at high school, students were taught in isiZulu and isiXhosa and at university, students were instructed in English. This impacted their academic performance. They recounted:

So, coming from there (his school) and then going to a lecture where we are taught in English the whole time. Like right now I am struggling. Having to adjust from learning in isiZulu to learning in English was very hard for us because most of the time you read a question when you're writing a paper, you're not sure what they are asking from you. You don't understand the requirements because maybe we don't know the basics or the principles of that question but because of the requirements, you are not sure what they want from you, due to us not understanding English. We struggled during first year but second and third year we have improved our English. (C1.C)

In high school, the teachers would teach Accounting in Zulu or explain things in Zulu. So now when I come to university, it is English all the time and that is not easy. I have to adapt and even when I am trying to ask questions or explaining to lecturers or to answer questions from lecturers, then I am trying to arrange my English. It is because I am used to asking questions in Zulu and it is just a barrier in that sense. In terms of the words or concepts in most of the modules, there would be big words that I don't understand but I have to go search them or even sometimes when I am doing questions where they say some words that I don't understand. There was one word that I didn't understand recently. Then you have to think, "What do they mean?", and just that one word would change the whole scenario and I didn't understand what that meant and I only get to understand after the paper for next time, but only for next time it be another difficult word. (C1.I)

English was taught in Zulu. They just said the English words in English and continue in Zulu. I had challenges here and there, but I wouldn't say it was that deep though. Besides, when I am writing an exam and there is a word that can cause me five marks and I don't understand, I remember that happened to me in FIA, and I don't understand what it means it becomes a problem. But in general, I wouldn't say it is an impediment. (C1.L)

One student explained that although he was taught in IsiXhosa at high school, he did not have any challenges when he entered university. C1.M uttered:

To me, there was no big change. In high school, yes, things were explained in Xhosa, but we wrote them in English. And I think the other thing that helped me is that I did some presentations and I was part of the debating group, so it helped a lot because I got used to speaking English. Then when I came here, I was able to ask questions to interact with the lecturer.

On the other hand, two students explained that English is not an impediment for learning. One of the students makes a concerted effort to communicate in English more than her home language. She said:

For me, I don't think so. It's not but I think that is subjective because in my case, I speak English more than I speak my home language. So, I could honestly qualify it as a first language, home language when you speak it. So, for me, English isn't really a problem. So, when I get to class and I interact with my lecturers, it's not really an impediment. It's a language that I speak fluently. It really isn't a problem. (C1.D)

I am also Afrikaans Home Language, but I wouldn't say that it was a problem transitioning from Afrikaans to English. It wasn't a difficult transition. I adapted pretty quickly within the first two months because the environment was English. So, you kind of forced to adapt to it and it was easy because of that so yeah. (C2.A)

C2.A further elaborated and attributed her easy transition to her private school tuition. She said: "I wouldn't say it was difficult for me to transition because I went to a private school. I still have the English in me".

An English home language student agreed with the above views and said: "No, I don't have any problems because I did English as a home language for my entire school career." (C1.J)

Some students identified gaps in the university curriculum, which would make the transition for English First additional language speakers easier. He expressed that the change in language of instruction can be an obstacle for English second language speakers. C1.B suggested a bridging course for English second language speakers. He noted first year modules such as Academic Literacy for Commerce, focusses on improving students' writing ability but does not help with students' understanding of the English Language. The student said: "ALC helps you a lot with writing but it does not help a lot with understanding English itself so an extra module would be beneficial especially for people coming from a non-English background".

Another student shared a similar concern as the one above. C3.C advocated for an additional module to help English second language speakers to adjust to the medium of instruction at university. She complained:

The thing that wanted so say on language is that on our university, English is the main language of instruction but in certain cases, they can accommodate people who speak different languages in a better way. I did a module in first year and the lecturer said that one of the students come to him and said they were struggling with English. It is an Afrikaans student and there was no department on university that helped these people. I think that is where the university is failing us. Yes, some people speak English most of the time but for other people coming from a small town where English is not the language that is spoken that often. I feel like there should be that module that helps you or gives you additional assistance if you want to understand English better because all the exams are in English. You are taught in English and it is difficult if that is not your home language. It (these students) should have assistance and not just one lecturer doing it. That it is actually something that the student can apply for when doing the application for undergrad.

University readiness programme

One student noted that his older brother's advice prepared him for the adjustment to university. C1.B uttered: "it was a big plus for me to lessen the gap between high school Accounting and university was my brother because he told me what the university expects of me"

On the contrary, C3.A (although ECP) conveyed that she struggled during her first year of university and this affected her academic performance negatively. She expressed the following: "when I came to first year, I was very, I would not say confused but my marks were not like high or anything so I didn't really know what I was doing".

One student conveyed the importance of the university students visiting high schools and sharing their experiences with the learners. However, she noted that it should be senior (second or third year) students who do school visits, as first year students might not have enough experience at university to explain the difficulties of the degree. C1.D made the following recommendation:

Please bring someone in second year or third year because first year was nice. First year was a breeze. People study and then they come back and tell you oh varsity is nice. Varsity is amazing and fun, but it was because they were in first year. It kicks in in second year and then you realise it's not fun.

Influence of Accounting as a school subject

Students revealed the discrepancies between high school and university in relation to Accounting as a subject, while others noted the similarities. One student observed the alignment between the Grade 12 curriculum and the first-year Accounting curriculum, in the first semester in first year. She stated that Grade 12 Accounting provided a frame of reference for her first year of Accounting studies. C1.D expressed the following "First year Accounting (assisted), in that being it gave me the basics so I knew what I was referencing from and I had an idea what I was doing but second year was just completely different."

Another student echoed the above sentiment. He said this similarity helped him in passing tests which covered topics which were similar, however, when new topics were introduced, C1.C encountered difficulties.

The chapters we wrote about in term test one, it was something really similar to high school, so it was easy for me because I remember my teachers, they were always emphasising something. Then term test two was more of chapters that were new to us. So, I didn't understand them before. Like I just crammed everything. What do you do in case you find something like this so I had to find past papers again then cram them again like I use to do on high school.

Two students corroborated the previous student's views however, the benefit was limited to the first couple of weeks of the first semester. They said:

Accounting helped me for the first four weeks in my first year. If someone took Accounting in high school, it's like only good for the first few weeks and then thereafter, no. Because after the four weeks, you learn totally different stuff. The equations changes, the accruals changes in some way. Like everything changes. You will be in the same position with the academic work after the four weeks. (C1.G)

To a certain degree, yes. I think for the first, it was kind of relevant for the first couple of weeks. In the whole year I guess, I mean so of the topics we had in matric were things we really did learn about at varsity but when we got here, it was more intense. (C1.D)

This above view was shared by C3.C. She expressed that high school Accounting helped them in her first and second year of studies:

The Accounting in high school, Grade Twelve Accounting helped me understand the basics of Accounting in preparation for university. So, I'd say to a certain degree it helped me with my first and second year because that was where the foundation was basically laid of Accounting.

So, to a certain degree, it helped me with first and second year, however, the content that is tested in Grade Twelve is not the same as what is tested at university and even the way it is tested.

Conversely, one student said that Grade 12 Accounting did not aid her in her first year at university and those students who did not complete Grade 12 Accounting would not be disadvantaged at university. C1.F said:

For me, I would say it really didn't help me, my matric knowledge to my first year, because it was totally different than what I was taught in my matric. For instance, let me make an example. Like in matric, since from Grade Ten, we'll like discuss an asset. Like and asset is anything the company owns right? But then when you come to first year, they'll like give you the specifics or the real definition, going into detail it's what an asset is. I feel like even if someone didn't like do Accounting at high school, I wouldn't say that would have hindered you while studying the first year knowledge because for me, with Grade Nine knowledge, you will still be fine in your first year in university.

Another student echoed the previous sentiment. Consultation with the lecturer and attending Thuthuka classes during her first year assisted the student with the basic concepts of Accounting. She said: "For my basics, I went to Miss Williams and the following day she called me in class. I just went to your office but yeah, also the Thuthuka classes helped but you helped the most because you explained the T-accounts." (C1.J)

A student who did not study Accounting as a school subject said that grasping the concepts in first year Accounting was difficult, but she managed to overcome it with the help of her peers and the Thuthuka classes. C2.B stated the following:

In terms of the content, I wouldn't say it helped because I didn't do it, but I was able to grasp it. The only challenge for me was like the first day. I remember, the question was "prepare the statement of financial acquisition" and I had no idea what that was, and I think it just messed up my confidence a little. I went to my room and I cried, and I thought I was going to fail and then my roommate had to teach me the basics of inventory, training stock, what are assets. I think Thuthuka had basics classes as well and only then I was able to be like "oh okay".

Teachers' lack of Accounting Pedagogical content knowledge

One student recalled his experience about the second term test in the first year, first semester. He said that there was a major difference in the expectation of students at university in comparison to high school. At high school, for example, learners memorised where components for particular ledger accounts were recorded, with no understanding as to the principles which underpinned the transactions. At university, however, memorisation alone was not sufficient, and

students were required to show understanding of Accounting principles during assessments. C1.A uttered:

The infamous first-year interest on loan question right, and we learnt it and then the lecturer asked ledger accounts which was for interest expense. And the way we were taught on high school, you memorise where everything goes in a ledger account and we didn't really know what the conceptual framework was for and what everything was for. I froze and I panicked. I didn't think okay what is my basics? Let me think - expenses increases on the debit side. I learnt you memorise the ledger account and you do it like that and that's what cost me a lot of marks in term test two.

Another student reflected on the previously mentioned test and gave an account of the lessons learnt from that experience. He said first year students expected a similar assessment style at university, which they were accustomed to from high school. He said at high school, topics were taught in a specific format and students were then tested in the same format. However, at university, students were taught topics in one format (for example general journals) but were expected to be able to apply other formats as well (for example general ledger). C1.B said:

She (the lecturer) wanted to see if we can think on our feet in the test to see if we tested, we can answer in another structure and that's what caught most people out because in high school we were taught this way and tested it (in the same way). At varsity, you are taught this way and tested another way, so you have to be quick on your feet and think for yourself a lot.

The difference in testing methods between high school and university, was echoed by C3.C "To a certain degree, it (Grade 12 Accounting) helped me with first and second year, however, the content that is tested in Grade Twelve is not the same as what is tested at university and even the way it is tested."

C3.B shared a similar experience:

Everything is different because they don't teach you on what you know. You guys teach us one way and then test us in a completely different way. In high school they'll show you that one way because they are going to give it to you in that way, in a sense and it's like already structures there, like the grids on the page and you just do it. So I used to use start from top to bottom, it's like your book is like yours to do it as you please and it's like when you come from like that like I can honestly say that doing the four-year

program, only for accounting, all the other modules (inaudible), the accounting part helped a lot

Another student further elaborates on his experience in the second semester of his first year at university. He thought he had a good understanding of accounting when he entered university but soon realised that this was not the case. C1.C said:

From second semester (first year) to today like I had to reteach myself Accounting. What is Accounting? I thought I knew Accounting, but I didn't know Accounting at all. Like at all. Because my lecturer, my first-year lecturer actually made sure that I know that I don't know Accounting.

C3.B shared the above views and said

When I first got here, I'll be honest; I never understood assets are equal to owners' equity (plus liabilities). I never understood the equation, to be honest. I knew nothing, I understood nothing, I got nothing from it at all and then afterwards you're like okay, oh, that's what they meant in high school, oh that's what she meant. Like, yeah you got an A in high school, but it does not count because when we got here it was a whole new ballgame

One student was of the belief that high school Accounting helped prepare him for his first year of B. Com Accounting studies. He viewed his high school Accounting knowledge as a basis for his tertiary studies and knew he would have to adapt when he entered university. He also noted that students had difficulty adjusting to their first year of university, because they clung to the teaching methods/ strategies utilised at high school. C1.H expressed the following view:

I would say high school Accounting was actually like an introduction on studying B. Com Accounting. So, when I got to first year it was fine. I remember what someone told me that I should forget the knowledge of what happened in high school because they are going to teach you (new) stuff and I think that people find it difficult to adapt to FIA in first year because they are use how we use to do it in high school. Some would say that we use to do it like this in high school, this way and this way.

Influence of other high school subjects

A student commented that Mathematics only assisted in her first year of studies. C1.D voiced the following opinion: High school is one dimensional. You get there, you cram the numbers they give you and you go into your exam and you pass. You can get away with it in first year. Second year, no. The person that was good in Maths survived the first year second semester but I don't know when they start getting to second year and third year.

5.3.2.2 Second year experience

Students stated that their high school had an impact on their first year of tertiary studies but felt that it did not have any real impact on their second year of academic studies. Two students shared the following sentiments:

Second year was completely different because now we start introducing group Accounting and that's really where things start getting a bit different, in that everything started to become new and even with the whole standards and everything. Second year was really different so high school was relevant for first year but not second year. (C1.D)

For me, it wasn't that challenging but when I go to second year it was actually challenging because second year everything is new, everything is so new so yeah. I would say overall that high school and first year accounting is like twenty per cent of what we do in varsity. (C1.H)

One student (C1.K) had a contrary view to the ones above:

In second year, it didn't really help but there are those small things where I look back to high school like equity ratios, those things that I learned in high school. I am able to think and imagine my high school teacher teaching us how to do the equity ratios. So, it helped from that way back to now.

One student noted that his critical thinking faculties were engaged and challenged in his second year of studies, much more than in high school or in first year of university, and C1.D said "I think the older you get and the more you progress with accounting the more critical about things and why are things actually the way they are".

The same student reflected on her learning style and realised that it had changed whilst at university. In her second year of studies at university, she started engaging critically with the content instead of merely accepting information without understanding. C1.D said "High school and first year is, to a certain degree, a foundation because you never really question why you are doing things.

When you get to second year, that's when you get the bigger picture as to why you are doing this."

Influence of other school subjects

Students noted that high school subjects, other than Accounting, did not have an influence on their second year B. Com Accounting studies. C1.B said that "For second year I had to rely on just studying and working because there was nothing that I could go back on to."

5.3.2.3 Third year experience

As students mentioned in the previous themes relating to English proficiency, English is a barrier to students' academic success. One student noted that his opinion relating to the low pass rate for one particular final year module (Management Accounting), is due to student's limited vocabulary and not due to the fact that they do not understand the principles/concepts within the module. C1.C said:

The reason the pass rate has been so low this tear is because it not because they don't understand the principle behind it. Like some people know what MAF is. You can go to them and ask them questions. Like what can I do if I get a question like this? They'll tell me every time its English. Like a person explain it to me in isiZulu and then you do it like this like this like this. Then like okay I will have faith in this guy's because he knows his stuff. Then he goes to paper and he will fail and then I'll wonder why he failed and then you be like you don't know why you failed but if you go through the question paper the English in that paper yoh! It was too much. It was too much for us because we are coming from a background where we learn English in isiZulu like isiZulu. (C1.C)

In MAF, people always complain about the English (C1.H)

Another student commented on the importance of mastery of the English language and its impact on the third year Management Accounting module. She said:

But it is quite amazing how they have ALC as a prerequisite for MAF and CFM. It is just again that emphasis on language and that's where the English kicks in because if you're not really a fluent English speaker, you will miss certain things when you're reading the scenario, so yeah. (C1.D)

5.4 CONCLUDING SUMMARY

The chapter presented the results of all the data collected from the three focus group interview groups. The chapter began with the presentation of the participants' information, including number of students who participated in the study from each cohort and per focus group interview group. The responses from the participants were presented thereafter. The researcher presented the results as objectively as possible and in the same manner they were conveyed to her.

The next chapter, Chapter 6, presents the discussion and interpretation of the results.

CHAPTER 6

DISCUSSION, RECOMMENDATIONS AND

6.1 INTRODUCTION

CONCLUSION

The results which were collected through the two data collection methods were presented in the previous two chapters. These results will be discussed and interpreted in this chapter. The discussion will commence with the results of the quantitative study, namely descriptive statistics. The academic achievement of cohort1 and cohort 2 were compared for the 2017 to 2019 academic years and then, cohort 3 with cohort 4 were compared from 2016 to 2019. Thereafter, the results from the focus group interviews will be discussed. The chapter will conclude with recommendations based on the results discussed.

This chapter concludes this dissertation with discussions, conclusions and recommendations. The aims and objectives of this study will be restated, and the findings of the study will be listed. Thereafter, the findings will be correlated to the literature which was discussed in Chapter 2. Then, the contribution of new knowledge to the existing body of knowledge in the Accounting education field will be presented. Finally, the chapter will narrate the limitations of the study and make proposals for future research.

6.2 AIM AND OBJECTIVES OF THE STUDY

The study aimed to determine the relationship between students' Grade 12 Accounting knowledge and their academic success in the B. Com Accounting degree at a university in the Western Cape. The first objective of the study was to determine if there is a difference in overall academic performance between students with Grade 12 Accounting knowledge and those students without Grade 12 Accounting knowledge. The second objective of the study was to determine whether other factors such as prior Mathematics knowledge, prior overall academic performance, and the language barrier had a relationship with students'

overall academic performance.

6.2.1 Main research question and sub-questions

Given the context described in Chapters 1 and 2 above, the main research question of this study was:

Are students with previous Grade 12 Accounting knowledge more successful in the completion of the B. Com Accounting degree than students without previous Grade 12 Accounting knowledge?

Two sub-questions guided the data collection and analysis process, namely:

- What other school subjects influence students' successful completion of a B. Com Accounting degree?
- What overall academic predictors influence the successful completion of a B. Com Accounting degree?

6.3 DISCUSSION OF THE RESULTS FROM DESCRIPTIVE STATISTICS

South African higher education institutions have been grappling with low throughput rates, particularly at undergraduate level. Despite universities having different admission requirements to give students access to the B. Com Accounting degree, there is very little or no empirical warrant to conclude that these requirements have a positive influence on the throughput rate within the minimum timeframe, which is three years and four years for the mainstream and the extended programme, respectively. While the Baard et al. (2010) study found that students with Grade 12 Accounting knowledge performed significantly better than students without it in university-level Accounting modules, we want to highlight that our study focused on a specialised Accounting degree. Further to this, we also analysed the academic performance of the students over the three years. The reason for this analysis was that we also wanted to gain an insight into how students' Grade 12 Accounting knowledge, and other Grade 12 subjects, namely, Grade 12 Mathematics and Grade 12 English, influenced their academic performance over the three years.

6.3.1 Discussion of descriptive statistics – cohort 1 and cohort 2

The findings revealed that most enrolments in the B. Com Accounting degree were students in cohort 1 (76.5%). The higher enrolment number for cohort 1 is understandable, as most students in this cohort exceeded the admission requirements for both Matric Accounting and Mathematics. While cohort 2 performed marginally better academically (by merely two percentage points) than cohort 1 in the degree programme for 2019. If we only look at the mean overall average as shown in Table 4.5, it is noteworthy that the throughput rate for cohort 1 (37%) was significantly higher than cohort 2 (20%). This significant finding demonstrates that cohort 1 had a slightly better chance of success (17%) in completing the degree. Hence, our findings do not concur with van Romburgh (2014) that the school Accounting curriculum does not adequately prepare students for university Accounting studies.

It was interesting to note in Table 4.2 the resilience shown by the females in cohort 2. While the male first-year enrolment was 37% higher, there was a significantly higher throughput rate for females in this cohort which was 50%. The females in cohort 1, however, had a lower throughput rate (41%) compared to the males (59%). A notable finding pertaining to race is the high proportion of Black students who enrolled in both cohort 1 (75%) and cohort 2 (91%). Linked to this finding, Black students in cohort 1 had a higher throughput rate than the students in other race groups and, in cohort 2, only Black students (100%) successfully completed the degree.

In Table 4.5, it is shown that in cohort 2 only students with English as an additional language successfully completed the degree, while cohort 1 achieved a 67% throughput rate. This is contrary to findings that second language English students experience studying in English as a barrier for success (Koch & Kriel 2005; Papageorgiou 2017). In Table 4.5, it is interesting to note that there is not much difference between English home language speakers (35%) and English additional language speakers (39%) when timeliness of graduation are compared.

This finding concurs with the finding of Crawford and Wang (2014) who found that over the four year period in which the study was conducted, there was no significant performance difference between native English speakers and non – native English speakers.

The empirical findings by Wong and Chia (1996) showed that students who achieved a higher grade in Mathematics at school were associated with better performance in a Financial Accounting course at university. The finding of this study concurs with the finding as this study revealed that the school academic performance in Mathematics of both cohorts had a strong influence on the throughput rate. Students in both cohorts, who obtained 70 marks or higher, enjoyed a significantly higher chance to successfully complete the degree in the minimum timeframe.

The findings also show that 28% of cohort1 who achieved 50-69 marks in Mathematics were successful. However, cohort2 students who achieved a mark lower than 70 did not complete the degree in the minimum timeframe. The findings also reveal that students in cohort1 with marks between 60 and 69 for Mathematics were able to complete the degree in minimum time, while this is not the case for students in cohort2. This factor could be attributed to the students in cohort1 having both Matric Accounting and Mathematics.

With regards to Accounting, in cohort1 only students who obtained 70 marks or higher completed the degree within the minimum 3-year period, while those with 80-100 marks have a higher throughput rate of 47%. This finding does not correlate with Xiang and Gruber (2012) that the benefit of high-school Accounting is only evident at first-year level and this benefit diminishes in subsequent year levels. Moreover, the findings illustrate that students who have achieved 80% or more in Accounting or Mathematics have a significantly higher probability of success which was 74% and 71% respectively. As such, this study concurs with Tinto (1993) that prior academic experience (schooling experience, grades) plays a role in student departure and directly influences their success rate.

In Table 4.5, it is shown in cohort1 that the higher the APS points obtained, the greater the chances of students graduating within minimum time. In cohort 2, it is interesting to note that only students who obtained above 45 points graduated within minimum time. Thus, the higher the points obtained, using the university's admission points system, the greater the chance of graduating within minimum time. The results of the study concur with the findings of Legese (2018) which found that overall average university marks are significantly correlated to average high school grades.

6.3.2 Discussion of descriptive statistics – cohort 3 and cohort 4

The findings revealed that when the average mean marks are compared in Table 4.9, it is noted that cohort 3 (56%) has a 5-percentage point advantage over their peers in cohort 4 (51%). Also noteworthy is that none of cohort 4 students achieved marks higher that 50-59 marks, whilst cohort 3 students achieved average marks within the 60-69 marks category. Although there are differences in academic performance between the two cohorts, Table 4.10 shows that the proportion of students who graduated within minimum time is almost identical. Cohort 4 has a slight advantage with a graduation rate of 29% and cohort 3 had a graduation rate of 28%. This significant finding demonstrates that cohort 3 had a slightly better final year average, however this does not translate into better throughput percentages for this cohort. Hence, our findings do not concur with Rowbottom (2013) that students with high school Accounting have lower academic performance than their peers without high school Accounting.

The results show that females outperformed their male counterparts in both cohorts. Table 4.10 shows that female students in cohort 3 had a throughput rate of 31% (male 23%) and cohort 4 had a throughput rate of 33% (male 0%). With regards to race, a notable finding pertaining to race is the 50% throughput for coloureds in cohort 4 and the other category in cohort 3.

In Table 4.10, it is shown that English home language speakers outperformed English second language speakers in both cohorts. In cohort 3, the difference in

throughout rates between English home language speakers and English second language speakers was a mere 3 percentage points (29% vs 26%). In cohort 4, only Home language students (40%) completed their degree within minimum time. This concurs with the findings of Tan and Laswad (2008) who found that students with English as their first language perform much better in comparison to students with a language other than English as their first language.

The findings also show that 37% of cohort 3 who achieved 50-59 marks and 33% who achieved 60-69 marks in Mathematics were successful. It is interesting to note that none of the cohort 4 students who achieved a mark lower than 60-69 marks completed the degree in the minimum timeframe. However, 33% of students who obtained 50-59 marks graduated within minimum time. This indicates that a higher Grade 12 Mathematics pass might not necessarily increase the chance of students' academic success in a B. Com Accounting degree. Also, another possible reason could be that ECP students complete foundational and/or introductory Mathematics courses in their first and second year of their B. Com Accounting studies. This finding concurs with Jansen and de Villiers (2016) who found that there was no significant relationship between high school Mathematics and a third year Accounting module.

With regards to Accounting, in cohort 3 there is a noticeable increase in graduation rate for students who achieved marks between 50-59 marks (15%), 60-69 marks (20%) and 70-79 marks (45%) in Grade 12 Accounting, except for 80-100 marks where the graduation rate was 29%. This finding does not correlate with Jansen and de Villiers (2016), whose the study examined the correlation between the grade achieved for high school Accounting and the third year Accounting module and found that there was no relationship between the two.

In Table 4.10, the results for cohort 3 show that there is a general increase in graduates the higher the points achieved using the university's APS, except for the 45-49 points category (27%). In the 50 and above points, 50% of students graduated within minimum time. In relation to cohort 4, only students who obtained 45-49 points graduated within minimum time. The findings concur with

the findings of Yigermal (2017) who found that prior academic ability is a predictor of academic performance at the university level.

6.4 DISCUSSION OF THE RESULTS FROM THE FOCUS GROUP INTERVIEWS

To achieve the objective of this research a semi-unstructured focus group interview design was used as an appropriate method to address the research question. The research study utilised focus group interviews to elicit final year students' opinions on the influence of Grade 12 Accounting, Grade 12 English, Grade 12 Mathematics, and Grade 12 overall academic performance on their academic success thus far in the B.Com Accounting degree. Three focus groups were interviewed with a total of 18 participants.

Two themes emerged from the focus group discussions, namely, students' perceptions of overall school experience and students' perception of overall university experience. The discussion of results will commence with the first theme and its subthemes and thereafter the results of the second theme and its subthemes will be discussed.

6.4.1 Discussion and analysis: Theme 1

The first theme was categorised as students' perceptions of overall school experience. The first theme has six subthemes, namely: school culture, developing resilience, teachers' Accounting pedagogical content knowledge, university readiness programmes, the influence of Accounting as a school subject and the influence of other high school subjects.

The *first* subtheme focuses on students' perceptions of their school culture. Students believed that a positive school culture played a major role in their motivation to succeed. Particularly, students mentioned the significant role played by teachers within the positive school culture. Two students shared the same sentiment about their school's influence on their discipline, which aided their transition from school to university. This finding is in contrast with Spaull (2015),

who postulates that the vast majority of schools, which served Black learners, remain dysfunctional and are unable to impart the necessary numeracy and literacy skills to learners.

Whilst some students within the focus group interviews completed their schooling at more affluent and privileged schools, others attended less affluent schools within the poorer communities. Socio economic circumstances seem to be also playing a role in students' academic success. One student firmly believed that parents' social status influences the knowledge and skills of their children. Further to this, learners' access to resources is stifled as a result of parents' social status. A student explained that she was compelled to attend schools outside of her community due to the school's lack of resources. Even though the school she attended was better than the school within her community, it was not necessarily the best school. This finding concurs with the finding of Hall and Giese (2009) that a number of schools continue to operate on a budget that inhibits the delivery of quality education or the provision of school infrastructure that is conducive to learning.

There were six dissenting views, which stated that high school did not play a role in their academic success at university at all. One student stated that she is not sure whether it did or not. One student sums it up by saying that even though it is important to have teachers that continuously motivate you, it is also up to the student to take the initiative to learn independently and be self-motivated.

The *second* subtheme lays bare students' narrative on their resilience. Despite students being raised in (doing their schooling) communities where gang violence is rife, they still showed resilience and self-motivation to obtain university access. It was also evident that teachers played a role in assisting students in developing resilience. One student explained how a teacher taught her to be an independent learner and this helped her to adapt to university life. On the other side of the coin, students were compelled to develop resilience because teachers were not adhering to the medium of instruction, which is English; in particular schools where the mother tongue was another South African language, for example, IsiZulu and IsiXhosa.

Students again demonstrated their resilience and reflected that their teachers were unable to adequately respond to questions. They then took the initiative to watch TV programmes related to Accounting and bought additional textbooks to facilitate learning.

The result of the study corroborates the findings of Ryan and Deci (2020) and Tinto (2017). Self-determination theory (SDT) focusses on human beings innate motivational tendency for learning and development and how it can be aided and encouraged (Ryan & Deci, 2020). SDT asserts that when the psychological needs are supported, it results in improved intrinsic motivation and internalization, which leads to higher academic achievement (Ryan & Deci, 2020). Tinto (2017) stated student motivation is key to students persisting and successfully completing their degrees.

In the *third* subtheme students described their views on the lack of teachers' Accounting pedagogical content knowledge. Certain mainstream students complained that teachers lacked pedagogical content knowledge. In one instance, a student explained that the basics of Accounting were not transferred correctly (taught properly). It appeared that students required a paradigm shift to understand the basics of Accounting, particularly when they transitioned from school to university.

Students were adamant that teachers were unable to adequately teach them Accounting. However, this motivated her to take charge of assisting other learners in the class to understand Accounting by tutoring them. Students believed that tutoring their peers gave them the confidence to become a self-motivated student at university. Students noted that they took the initiative to do independent learning and this played a tremendous role in developing resilience to overcome the challenges they experienced during their university studies.

Students said an example of teachers lacking pedagogical content knowledge was the fact that teachers overloaded them with question papers instead of teaching learners in depth knowledge of processes required to understand Accounting. Two students in the mainstream programme further expanded that teachers did not adequately explain Accounting concepts to them and promoted rote learning. Similar sentiments were shared by students in the extended curriculum programme. A student lamented that teachers promote rote learning, and this was a stumbling block when entering university and this is the reason why many ECP students are unable to complete the degree in the minimum time frame.

Due to the teachers' lack of pedagogical content knowledge, a student referred to the underutilisation of resources, such as textbooks. This could be the result of teachers' inability to unpack the exercises in the textbooks because most textbooks do not provide teachers with memorandums.

The results are in congruence with the finding of Rajoo (2012). Rajoo (2012) found both learners and teachers highlighted learners' lack of Accounting knowledge and skills when they were in Grade 10. This deficit in knowledge and skills was caused by the neglect Accounting suffers during the Grade 8 and 9 years. The author infers that this deficit was also reflected in the matriculation results and thus concludes that this is due to ill-equipped teachers who lack the necessary knowledge and skills to deliver the curriculum successfully. Further to this, Sikhombe (2018) found that Grade 12 teachers do not have the required content knowledge in Accounting and appropriate level of teaching ability, which leads to poor academic performance of the Grade 12 learners, amongst other factors.

The *fourth* subtheme focuses on students' perceptions of the school readiness programme. The results showed that there was a disjuncture between school and university expectations. In this regard, students highlighted that they were not adequately prepared for university at school level (during their schooling). For example, two students felt that the resources provided for assessment at school, were not given at university.

Further to this, students related that they were unaware of what a Chartered Accountant is and that the school never gave them much insight of different career choices. Another student echoed a similar sentiment, where he took the

initiative to do research on Chartered Accountancy and that the school provided no assistance in terms of career choices.

In some cases, schools also provided no assistance with bursary applications. While this was the case, one student took it upon herself to apply for a bursary to obtain university access. It is evident in the results that certain schools place a lot of emphasis on sport as opposed to preparing their learners for post school education and training.

The finding of this study corroborates those of Venter (2020). Venter (2020) established that EMS learners were not prepared for post school studies. When interviewed, learners voiced that the school does not offer career counselling and learners discovered that they do not have the correct subjects for their chosen career paths. Also, learners said that they did not receive assistance from their school with university and bursary applications.

The *fifth* subtheme focuses on students' perceptions of the influence of Accounting as a school subject. There was an overwhelmingly positive response from the cohort 1 mainstream students who did both Accounting and Mathematics at high school. This was corroborated by cohort 3 students, stating that the Grade 12 Accounting and the first year of ECP are similar.

These students had varied opinions of the influence of high school Accounting on their academic success and provided numerous examples. Three students provided insights of how basic Accounting knowledge assisted them with first year Accounting. Further to this, it became evident that the Grade 12 Accounting curriculum to a certain extent aligns with first year Accounting module but not in second year.

However, not all students agreed that Accounting played a major role in understanding Accounting in first year. For example, one interviewee expressed the view that school Accounting only assisted in the first three weeks of the first semester. Corroborating to a certain extent with the above sentiment, a student was of the opinion that while school Accounting was beneficial only for term one,

he had to take the initiative to independently reteach himself Accounting concepts and processes.

Papageorgiou (2019) showed that Grade 12 Accounting knowledge creates a benefit, in first-year Accounting modules, when compared to students who do not have Grade 12 Accounting knowledge. The finding of this study found some similarity to the finding of Papageorgiou (2019).

All but six students considered Grade 12 Accounting as beneficial to their academic success in their second year of studies. Two students from cohort 2 noted that they did not complete Grade 12 Accounting and believed that Grade 12 Accounting is not necessary to achieve academic success in B. Com Accounting.

The *sixth* subtheme focuses on students' perceptions of the influence of other high school subjects. More than half of the students agreed that Grade 12 Mathematics and Grade 12 English were the subjects that helped in the first and second year of studies, other than Grade 12 Accounting. This supports the results of the study conducted by du Plessis and Gerber (2012) which established a strong correlation between Grade 12 Mathematics and Grade 12 Accounting on the academic performance in the first-year university level Accounting module.

While Accounting as a school subject had a major influence on students' academic success reaching third year in minimum time, students also related that there were other school subjects that played a pertinent role in their academic success. Subjects such as Mathematics, Economics, Business Studies, English (first and additional language), and Computer Application Technology were highlighted.

Students across all three focus group interviews were of the view that Mathematics assisted them to facilitate their understanding with modules such as Financial Accounting (first and second year), and Mathematics (first year). Mathematics at school also made modules such as Business Statistics easy. Students also expressed how Grade 12 Mathematics assisted in their critical thinking, especially in modules such as MAC (Management Accounting).

English as a school subject appears to give students the ability to comprehend, especially to comprehend what is required from them at university, such as doing class activities and assessments. Students noted that English aided their cognitive ability to prepare the Accounting financial statements and to systematically interpret what was required of them. Studying English additional language as a school subject also appeared to be helpful with the social interaction with peers at university. Further to this, Grade 12 English aided communication and writing skills. The result concurs with the findings of a study conducted in both South Africa and Tanzania and showed English proficiency is a core factor influencing students' academic success (Brock-Utne, 2007). Further to this, Harb and El-Sharaawi (2006) postulate that in a country where English is not the students' first language, Business and Economic students' proficiency in English has a statistically significant relationship with Arabian students' academic performance.

It was evident in the results that commercial subjects such as Economics and Business Studies, gave students the advantage to engage more meaningfully with modules that had a business underpinning. One student linked Business Studies with Auditing (second year) and explained how different concepts such as "business risks" facilitated his understanding of this module. Evident in the results was that Business Studies did not only assist students in Auditing, but also first year modules such as Information Systems and Management and second year modules such as Management Accounting.

Interestingly, so many students highlighted that Computer Application Technology (CAT), also played a major role in the B. Com Accounting degree. According to one student, being familiar with the Microsoft software packages enabled her to apply the knowledge she obtained in high school in different modules. The knowledge and skills obtained studying Computer Application Technology at school was also beneficial in her second year.

6.4.2 Discussion and analysis: Theme 2

The second theme was categorised as students' perceptions of overall university experience. The second theme has three subthemes, namely: first year experience, second year experience and third year experience.

The *first* subtheme focuses on students' perceptions of their first-year experience. Students narrated their first-year experiences in relation to English as a language barrier, University readiness programme, the influence of Accounting, and the impact of teachers' lack of pedagogical knowledge. In the context of this study, not all students are English home language speakers. When the question was posed if the language of instruction was an impediment to their academic success, students had mixed views.

Students, whose home language is English, appeared to have little to no challenges with the language of instruction. In fact, one student felt that his vocabulary expanded at university. This finding is in line with the study of Howie (2003), where learners who are taught in their home language which is the official medium of instruction, namely English and Afrikaans, scored higher marks in mathematics. On the other side of the coin, students whose home language is not English, had many challenges which stemmed from school and remained an obstacle when they accessed university. English as the medium of instruction can be an impediment to students' success at university. One challenge that was quite evident was that while the medium of instruction at so called Black schools is English, teachers taught learners in their mother tongue.

Three English second language speakers recalled their difficulties in adjusting to the language of instruction at university. They said their difficulties stemmed from the fact that at high school, students were taught in isiZulu and isiXhosa and at university students were instructed in English. This impacted their academic performance. One student, on the one hand, explained that although he was taught in IsiXhosa at high school, he did not have any challenges when he entered university. On the other hand, two students explained that English is not an impediment for learning. One of the students makes a concerted effort to

communicate in English more than her home language. Papageorgiou (2017) found a strong correlation between students who studied English as a first language, English as first additional language and Afrikaans as first additional language with Accounting 1 performance. This finding of this study supports the one by Papageorgiou (2017) and one may infer that whether a student completes English first language or English first additional language is irrelevant. It seems that English proficiency is important for academic success.

Some students identified gaps in the university curriculum, which would make the transition for English First additional language speakers easier. He expressed that the change in language of instruction can be an obstacle for English second language speakers. A student suggested a bridging course for English second language speakers. He noted first year modules such as Academic Literacy for Commerce, focus on improving students' writing ability but does not help with students' understanding of the English Language.

In addition to this, students spoke of *university readiness programmes*. One student conveyed that she struggled during her first year of university and this affected her academic performance negatively. This is in contrast to the finding by Monnapula-Mapesela (2015) who found that when first year South African students were interviewed, the students believed that they had the necessary skills and were prepared to successfully complete their degree at tertiary institutions. When their perceptions were compared to their academic performance, the opposite was found to be true. Students conveyed the importance of the university students visiting high schools and sharing their experiences with the learners. However, they noted that it should be senior (second or third year) students who do school visits, as first year students might not have enough experience at university to explain the difficulties of the degree.

Students shared their perceptions of the *influence of Accounting as a school subject*. Students revealed the discrepancies between high school and university in relation to Accounting as a subject, while others noted the similarities. Students observed the alignment between the Grade 12 curriculum and the first year Accounting curriculum, in the first semester in first year. They stated that Grade

12 Accounting provided a frame of reference for her first year of Accounting studies. The similarity helped them in passing tests which covered topics which were similar, however, when new topics were introduced, students encountered difficulties. In contrast, some students noted that the benefit was limited to the first couple of weeks of the first semester. This finding is corroborated by Papageorgiou (2019) who found a statistically significant relationship between high school Accounting and students' academic performance in the first year Accounting modules.

Conversely, one student said that Grade 12 Accounting did not aid her in her first year at university and those students who did not complete Grade 12 Accounting would not be disadvantaged at university. Consultation with the lecturer and attending Thuthuka classes during the first year assisted the student with the basic concepts of Accounting. A student who did not study Accounting as a school subject said that grasping the concepts in first year Accounting was difficult, but she managed to overcome it with the help of her peers and the Thuthuka classes.

Students presented their views on the misalignment between high school and university. Students said that there was a major difference in the expectation of students at university in comparison to high school. At high school, for example, learners memorised where components for particular ledger accounts were recorded, with no understanding as to the principles which underpinned the transactions. At university, however, memorisation alone was not sufficient, and students were required to show understanding of Accounting principles during assessments.

Another student reflected on a test and gave an account of the lessons learnt from his first semester university level Accounting module. He said first year students expected a similar assessment style at university, which they were accustomed to from high school. He said at high school, topics were taught in a specific format and students were then tested in the same format. However, at university, students were taught topics in one format (for example general journals) but were expected to be able to apply other formats as well (for example general ledger). Then,

another student thought he had a good understanding of Accounting when he entered university but soon realised that this was not the case.

On the other side of the coin, other students were of the belief that high school Accounting helped prepare them for their first year of B. Com Accounting studies. They used high school Accounting knowledge as a basis for their tertiary studies and knew they would have to adapt when they entered university. Students experienced difficulties adjusting to their first year of university, because they clung to the teaching methods/ strategies utilised at high school.

The *second* subtheme lays bare students' narrative of their second-year experience. Students in two of the three groups noted the polarity in teaching, assessment, and learning outcomes between high school and university. The focus on memorisation at high school, as opposed to understanding the content, is a theme that was pervasive throughout the focus group interviews.

One student noted that his critical thinking faculties was engaged and challenged in his second year of studies, much more than in high school or in first year of university. The two groups agreed that critical thinking skills are not taught or developed at high school, a skill which is imperative in academic success at university. The student reflected on her learning style and realised that it had changed whilst at university. In her second year of studies at university, she started to critically engage with the content instead of merely accepting information without understanding.

In the *third* subtheme students described their views on their third year experience. As students mentioned in the previous themes relating to English proficiency, English is a barrier to students' academic success. One student noted that his opinion relating to the low pass rate for one particular final year module (Management Accounting), is due to students' limited vocabulary and not due to the fact that they do not understand the principles/concepts within the module.

6.5 RECOMMENDATIONS AND CONCLUSIONS

In summary, this chapter presented the discussion and interpretation of the results. This chapter required a rigorous analysis of the large volume of data. In this mixed method design, the study starts with the quantitative part and is followed with the qualitative portion. In this manner, the results of the qualitative study can help explain the results of the quantitative study (Lamprecht & Guetterman, 2019). The recommendations are as follows:

- The recommendation for South African universities is to conduct empirical analysis to determine how Matric academic performance and demographic characteristics influence the throughput rate of a particular degree. We believe that studies of this nature could mitigate the high failure rate in undergraduate programmes. While we acknowledge that universities are under pressure to increase epistemological access, it is also their obligation to implement intervention programmes throughout the degree programme, in particular, to those students who only meet the minimum requirements for the mainstream courses.
- Interventions that may be implemented could include a discipline specific peer mentoring programme to provide support particularly at first and second-year levels of their study and offer additional tutorial sessions over the three-year period of study. In addition to this, Accounting support programme for those who enter the degree programme without Grade 12 Accounting, namely Cohort 2 and 4, is needed. This has traditionally been done through traditional tutorial programmes. However, in line with the ever-changing technology, an Accounting App can be developed which students may use on their phones/ tablets/I-pads. The application could incorporate extra materials and webinars.
- Alternatively, given the low throughput rate of students who meet the
 minimum requirements, we strongly suggest that the admission
 requirements for the B. Com Accounting degree be revised with the
 objective to increase throughput rate.
- The entry requirements should be appropriate to the specific degree and

- the entry requirements for quantitative degrees should pay careful consideration to quantitative high school subjects.
- A university readiness programme to help students transition from high school to University should also be implemented. In addition to the existing orientation week, the university or faculties should implement further programmes to help students bridge the divide between high school and university. Specifically, schools could provide students with guidance counselling via pre-recorded videos (authorised by Western Cape Education Department) to support university readiness for learners.
- As lamented in the results section of the study, schools should provide students with assistance in applying to universities and bursaries.
- Currently, students' Grade 12 English is used as a measure of their proficiency in English. The results in the descriptive statistics and students' responses showed mixed results. It is recommended that other measures of assessing students' English proficiency be put in place.

6.6 LIMITATIONS OF THIS STUDY

One limitation of this study is the influence of students' home environment on their academic success. Students have diverse backgrounds and whilst some students may have stable environments, others might not enjoy that same privilege.

6.7 CONCLUDING SUMMARY

To conclude, this study explored the influence of Matric Accounting knowledge as well as other factors (Matric English and Mathematics, Overall Grade 12 average mark as well gender and race) on the successful completion of students in a B. Com Accounting degree and the findings confirm our hypothesis. Finally, given the findings of this study, it is evident that the focus of universities should not only be on epistemological access but also on student success, meaning, to increase throughput rate within the minimum time frame.

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CLEARANCE LETTER FROM THE UNIVERSITY AND PERMISSION LETTER



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09 October 2019

Ms B Williams Accounting Faculty of Economics and Management Sciences

Ethics Reference Number: HS19/8/13

Project Title: Exploring the influence of students' Grade 12

accounting knowledge on their academic success in a B.Com Accounting degree at a university in the Western

Cape

Approval Period: 09 October 2019 – 09 October 2020

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

pries

Ms Patricia Josias Research Ethics Committee Officer University of the Western Cape

HSSREC REGISTRATION NUMBER - 130416-049

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

APPENDIX B

INFORMATION SHEETS





DEPARTMENT OF ACCOUNTING

PARTICIPATION INFORMATION SHEET

RESEARCH TITLE:

Exploring the influence of students' Grade 12 Accounting knowledge on their academic success in a B.Com Accounting degree at a university in the Western Cape.

Dear Participant

You are invited to participate in a research study conducted by Badrunessa Williams who is an academic staff member at the University of the Western Cape. The research study aims to determine the influence of students' Grade 12 Accounting knowledge on their academic success in a B.Com Accounting degree at a university in the Western Cape.

Before you decide to participate, it is important for you to understand the purpose of the research and what it would entail. Please take time to read the following information carefully and discuss it with other participants if you wish. If you are unclear about anything, I would be happy to answer any questions you may have.

PURPOSE OF THE STUDY

The research purpose is to determine the influence of students' Grade 12 Accounting knowledge on their academic success in a B.Com Accounting degree at a university in the Western Cape.

DESCRIPTION OF RESEARCH AND YOUR INVOLVEMENT

The research seeks to determine whether Grade 12 Accounting influences students' academic success in B.Com Accounting degree at a University of the Western Cape. It would be beneficial to the Department of Accounting and University at large, to determine whether Grade 12 Accounting influences academic success. Further, this research would also determine whether there are other factors that influence students' academic success. Your opinion, as B.Com Accounting final year student, would be invaluable to this study. Focus group interviews will be conducted which consist of group interviews with 6 – 8 participants. The researcher will ask structured questions.

CONFIDENTIALITY

Please note that the study will not divulge any of your personal details. Any information that might be used to connect responses to an individual will be anonymized and disclosed only with your permission. All participants will be required to maintain confidentiality regarding the responses from other participants in the focus group. The researchers shall keep records and tapes of your participation, including a signed consent form which is required from you if you agree to participate in this research study, locked away securely at all times.

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VOLUNTARY PARTICIPATION AND WITHDRAWAL

Your participation in this research is entirely voluntary, which means that you can decline the offer to participate in the research study. It is your decision as to whether or not you take part in the research study. If you decide to participate in this study, you may withdraw at anytime without any consequences to you. You are free to withdraw at any time and you have the right to do so without providing any reason. You may also choose not to answer particular questions. If there is anything that you would prefer not to discuss, feel free to say so.

RISKS

There are no known risks associated with your participation. In particular, the researchers note the following:

- The fact that participation is voluntary;
- The fact that participants are free to decline to answer any question(s) or withdraw from the research at any time without any negative or undesirable consequences to them;
- That responses will be used only for purposes of the research; and
- That respondents will be granted anonymity should they desire so; or else be identified by code
- You are unlikely to benefit personally from participating in this study, although your responses may be used to inform decision-making and so may impact on others.

PAYMENT FOR PARTICIPATION

There are no costs or payment for participating in the study.

INFORMED CONSENT

Your signed consent to participate in this research study is required before I proceed to interview you. I have included the consent form with this information sheet so that you will be able to review the consent form and then decide whether you would like to participate in this study or not.

QUESTIONS

Should you have any further questions or wish to know more, I can be contacted as follows:

Researchers names:

Badrunessa Williams

Corresponding researcher: Badrunessa Williams

Staff number:

271618

Contact number:

021 959 9264

E-mail address:

bawilliams@uwc.ac.za

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APPENDIX C

CONSENT FORMS





DEPARTMENT OF ACCOUNTING

CONSENT FORM TO PARTICIPATE IN FOCUS GROUP INTERVIEW

RESEARCH TITLE: Exploring the influence of students' Grade 12 Accounting knowledge on their academic success in a B.Com Accounting degree at a university in the Western Cape.

In language that I understand, I was informed about the following:

- The nature and purpose(s) of the research;
- That the required information will be collected through focus group interviews (the research instrument);
- · That the interviews will be recorded;
- The identity and institutional association of the researcher(s) and project leader as well as their contact details;
- · The fact that participation is voluntary;
- The fact that participants are free to withdraw from the research at any time without any negative or undesirable consequences to them;
- That responses will be used only for purposes of the research;
- That respondents will be granted anonymity should they desire so; or else be identified by code names;
- That respondents that partake in focus group discussions must undertake to maintain confidentiality with regard to what others say in those discussions; and
- The possible risks which participants may be exposed to and benefits they may receive as a result of their participation in the research.
- The contact details for the Humanities Social Sciences Research Ethics Committee at the University of the Western Cape, Tel: 021 959 4111.

With full knowledge of the a Participant name: Participant signature: Date: Place:	bove, I agree to participate in this study:
Researcher: Researcher signature: Employee number: Contact number: E-mail:	Badrunessa Williams 271618 021 959 9264 bawilliams@uwc.ac.za

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STRUCTURED INTERVIEW SCHEDULE





DEPARTMENT OF ACCOUNTING

STRUCTURED RESEARCH INTERVIEW SCHEDULE

Project title: Exploring the influence of students' Grade 12 Accounting knowledge on their academic success in a B.Com Accounting degree at a university in the Western Cape.

- 1. In your opinion do you believe that Grade 12 Accounting assisted you to be successful in your first and second year of your degree?
- 2. What other Grade 12 school subjects assisted you to be successful in your first and second year of your degree?
- 3. Do you think that the school that you matriculated from played a role in your academic success thus far in your degree programme?
- 4. Is the language of instruction an impediment to your studies? If so, please elaborate.

