A STRATEGY GUIDE TO IMPROVE POOR ACADEMIC PERFORMANCE OF FIRST YEAR ACCOUNTING STUDENTS AT A UNIVERSITY OF TECHNOLOGY

By

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DECLARATION WITH REGARD TO
INDEPENDENT WORK

I, Matsolo Mamookho Claurina Mokhampanyane, Identity number: and student number , do hereby declare that this research project submitted to the Central University of Technology, Free State for the Degree: Doctor of Education, is my own independent work; and complies with the Code of Academic Integrity, as well as other relevant policies, procedures, rules and regulations of the Central University of Technology, Free State; and has not been submitted before to any institution by myself of any other person in fulfilment (or partial fulfilment) of the requirements for the attainment of any qualification.

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SIGNATURE OF STUDENT **DATE**

DEDICATION

To my late parents: Elias Lefu and Ernestina Mantholelo Mamofana Matete.

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ABSTRACT

The focus of the study is on a strategic guide to improve poor academic performance of first year Accounting students at a University of Technology. Students' academic performance is the sole responsibility of all educational stakeholders. The University through its inhabitants are expected to turn students into knowledge workers, ensure intelligence growth and avail educational opportunities to all. The study was tethered in the constructivism theory, where qualitative research methodology was adopted in order to address the main and sub-research questions of the study.

The population of the study consists of all Accounting lecturers and students repeating Accounting at first year level at the Central University of Technology, Free State. Five lecturers and sixty students were purposively sampled. Qualitative data was collected through interviews with lecturers and open-ended questionnaires distributed to students. A thematic content approach strategy was employed to analyse data.

Information gathered from questionnaires and interviews revealed that there is insufficient support provided to first year students; most participants viewed Accounting as a critical subject that needs full preparedness and continuous interaction; students and lecturers were aware of the factors that are hindering a positive pass rate of first year Accounting students. Furthermore, it became evident that the university falls short on full control over some of its intervention programmes. Students claimed that they do not fully benefit from those intervention programmes. They also had some suggestions that can be employed by the institution in order to realise positive academic performance of such students. The institution needs to re-visit their intervention programme model for the risky and first year students.

Based on the findings and recommendations of the study, a strategy guide model to improve academic performance for first year Accounting students is proposed.

Keywords: Strategic guide, Academic performance, Accounting, Accounting students, first year students, critical thinking, continuous Interaction, Pass rate.

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ACRONYMS

HEIs	Higher Education Institutions
UOTs	Universities of Technology
CHE	Council on Higher Education
DHET	Department of Higher Education and Training.
ICT	Information Communication and Technology
CER	Critical Emancipatory Research
ZPD	Zone of Proximal Development
PBL	Problem-based Learning
BICS	Basic Interpersonal Communication Skills
CALP	Cognitive Academic Language proficiency

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CHAPTER 1

INTRODUCTORY ORIENTATION

1.1 INTRODUCTION

Higher Education Institutions (HEIs) are ideally placed to offer essential generic and specific learning and skills to enable students to succeed in a world of rapid change (Young & Gamble, 2009:5). However, students' continuous underperformance and failure to pass subjects that they are enrolled for at the first year of study remains a puzzling issue. Under-performance of first year students seems to be a worldwide tendency, more particularly in first year Accounting (Duff, 2004:409-410; Steenkamp, Baard & Frick, 2009:113; Barnes, Dzansi, Wilkinson & Viljoen, 2009:36; Joubert, 2010:1; Pule, 2015:1). First year Accounting students' failure rate (under-performance) has been an area of concern for all educational stakeholders (students, parents, lecturers, institutions of higher learning and government). In this study the researcher investigates the contributing factors towards the high failure rate of first year Accounting students and seeks to design a strategy guide to improve the academic success rate of such students. This chapter provides an orientation to the study.

1.2 BACKGROUND OF THE STUDY

South Africa's public HEIs have undergone a radical transformation and restructuring during the early part of the 2000s. The reasons for higher education transformation were aimed at the eradication of education inequalities and distortions of the South African education system (Arnolds, Stofile & Lillah, 2013:3). According to the Development Bank of South Africa (2010:5), the transformation was done with the purpose of ensuring that higher education is structured in such a way that it could cater for increasing student enrolments from previously disadvantaged communities, as a response to the changing societal interest needs. Therefore, the transformation could be meant to attain access massification, equity and funding in higher education. The result of this approach would eliminate disparity between previously disadvantaged and advantaged sections of the South African society.

All HEIs in South Africa have an obligation to address changing socio-political conditions in South Africa (CHE, 2011:56). The 'traditional' Universities mostly offer theoretically oriented university programmes (mostly degrees), while the comprehensive universities offer a combination of academic and vocational diplomas and degrees. The universities of technology (UoTs) focus on vocationally oriented education that is industry related. The focus of this study is on the last group of universities.

UoTs have a distinctive purpose and focus when offering specialised knowledge in skills-oriented fields of study, such as Accounting. As Accounting is regarded to be a rule oriented and analytical subject with exact answers that are either correct or incorrect, this simply implies that students should possess analytical capabilities to solve any Accounting task (Demski, 2007:153). It is on this basis that UoTs should ideally focus more on application of knowledge through well-defined Accounting subject content. Accounting as a subject should enable students to identify, collect, describe, record transactions and communicate information about a business entity.

The dissemination of the collected information should be distributed to groups and individuals who are entitled to the financial information of that specific organisation (Broadbent, 2002:433). The activities would enable students to be able to assist in financial decision making. Therefore, it is for this reason that the ideal purpose of the universities of technology is to deliver students qualified in Accounting, science, engineering and technology and as such address the shortage of critical skills in these areas (Nxesi, 2013:10).

Young and Gamble (2009:6) assert that the academic success of Accounting students depends not only on the Accounting curriculum content but also on well-defined programmes of Accounting. The programme that caters for students' background and experiences in relation to the subject. It is clear that programmes that tap on students' experiences and backgrounds are key to students' success rate. Therefore, for these reasons there is evidence that lecturing processes which apply various lecturing approaches, such as the dialogical approach, the use of audio visual tools, simulations and technology-based tools and apparatus may obtain high pass rates (Lucas,

2006:386). Therefore, approaches that would enable students to learn according to their own way and encourage interaction amongst themselves during the process of learning must be considered as effective to attain successful pass rates in Accounting.

Reflecting on the previous paragraphs, Young and Gamble (2009:6) are of the opinion that coordinated lecturing programmes, curriculum content, academic intellectuality and the appropriate methods of lecturing and learning are all relevant towards results improvement. Moreover, Muller (2009:209) is correctly concerned that an overemphasis is often placed on contextual knowledge to the virtual exclusion of conceptual knowledge. It is clear that equal attention should be placed on both contextual and conceptual knowledge during the lecturing and learning process. It is in this context that content knowledge and methodology of lecturing Accounting are both essential to support students in their academic endeavour. In this way, mastery of content knowledge and pedagogy would prepare students for challenges of the global economy and attain good academic standing.

Pedagogical content knowledge refers to improved logical and effective or advanced thinking about the lecturing and learning process (Anderson, 2012:4). Therefore, the lecturer's subject knowledge and pedagogy (lecturing and instruction) could be conceptualised as mutually interdependent concepts, and thus should be combined to advance lecturer knowledge (Ball, 2000:12). Additionally, Edson, Marici and Luciano (2004:3) argue that learning styles (as a corrective measure) can be understood as a process of changing behaviour, while the choice and utilisation of lecturing methods (as an effective approach) are different for each environment due to specific characteristics (such as culture and historical background). According to Biggs, as cited in Steenkamp *et al*. (2009:113), the students bring with them an accumulation of assumptions, motives, intentions and previous knowledge during the learning process which will determine the course and quality of learning that may take place in future.

The massification and increasingly diversified student populations in HEIs might increase the need for Accounting lecturers to take note of the students' assumptions, motives, intentions, their learning styles, learning approaches, and previous knowledge that may influence their academic performance. Steenkamp *et al.* (2009:114) state that low throughput rates in Accounting have already influenced

lecturers to reflect on their lecturing methods and students' learning styles and approaches. Therefore, lecturers should be encouraged to shift from the traditional approaches of lecturing, which is routine-orientated and repetitive to more effective and efficient approaches which are student-centred. Furthermore, it is believed that students need to take part and contribute to the core content of their learning. Students can engage better in their learning through the introduction of work-integrated learning to the relevant firms that would allow them to practice the theory they have learned in the classroom situation (Martins, Rees & Edwards, 2011:9).

1.3 PURPOSE AND SIGNIFICANCE OF THE STUDY

The purpose of this study is to ascertain problem areas experienced by first year Accounting students and to draft a strategy guide for teaching and learning to assist both Accounting lecturers and first year students. Furthermore, the study is meant to enhance the pass rate once problems relating to failure are established and corrective mechanisms implemented.

This study would be of specific significance in that it may encourage all stakeholders (lecturers, curriculum developers, university support services, students) to revisit the curriculum and approaches/methods of teaching and learning of Accounting. The study suggest the strategy model as discussed in chapter six that encourages and specifies responsibilities of all interested educational stakeholders. This addition to the body of knowledge could serve as a framework that can provide suggestions towards improving academic performance of first year Accounting students.

1.4 STATEMENT OF THE PROBLEM

The main objective of educational plans in Accounting is to ensure that students are academically prepared to be successful in assessment processes and ultimately obtain their qualification to enter the Accounting profession or related employment. The pass rate of first year Accounting students at most universities, however, is an area of concern. Many problems exist in current Accounting education leading to students not being successful in their Accounting studies, for instance, content and design of the curricula, teaching and learning strategies, preparedness of students,

support provided to students and socio-economic factors. Studies by Igwe and Ikatule (2011) and Tshabalala and Ncube (2013) included the above problems and added poor grounding in the subject area at lower levels, fear of the subject and students' lack of self-motivation.

1.5 RESEARCH QUESTIONS

The stated problem leads the researcher to the following research questions:

- Which theories underpin the teaching and learning of a subject such as Accounting?
- Which learning styles and approaches are relevant for academic success in first year Accounting?
- Which factors contribute to poor academic performance amongst first year Accounting students?
- What are the institutional intervention mechanisms in place to improve academic performance of first year Accounting students?
- What should a strategy guide to assist first year Accounting students include?

1.6 RESEARCH OBJECTIVES

The objectives of this study are:

- To determine the cognitive theories that underpin the teaching and learning of a subject such as Accounting;
- To ascertain the learning styles and approaches relevant for academic success in first year Accounting;
- To provide non-cognitive factors impacting on the Accounting performance of first year students;
- To establish factors contributing to poor academic performance amongst first year Accounting students;

- To determine the institutional intervention mechanisms in place to improve academic performance of first year Accounting students;
- To draft a strategy guide to assist first year Accounting students.

The research questions and objectives lead directly to the design and methodology followed in this study.

1.7 RESEARCH DESIGN AND METHODOLOGY

Maree (2007:70) refers to research design as a plan and structure or a strategy which is used to obtain evidence to answer research questions. Research design specifies the selection process of the participants of the study, data gathering approaches and the data analysis of the particular study. Furthermore, Leedy and Ormrod (2013:23) describe research design as a process focusing on the fundamental philosophical assumptions to stipulating the selection of participants for any study, the data gathering techniques to be employed and the data analysis method.

1.7.1 Research design and method

For this study, a phenomenological research design is used. McNeil (2015:25) explains that phenomenology emphasises the subjective experiences that people have, and the interpretations and meanings that these persons give to the world that surrounds them. Phenomenology is interested in the significance of the behaviour of certain groups of people from the point of view of that group. A qualitative approach to collecting data is used. Hendrik, Hutter and Bailey (2011:9) mention that qualitative research deals with data that are mainly verbal and is more concerned with understanding social phenomena from the viewpoint of the participants. Leedy and Ormrod (2013:137) assert that in qualitative research there are no magic formulas nor certain recipes to follow, rather the specific methods that the researcher uses will ultimately be constrained by the limit of the researcher's imagination. It is clear that qualitative research does not provide progression steps to be followed to attain data from the participants, rather the researcher needs to create the research design that would suit the research process. The term qualitative incorporates several approaches

to research. Therefore, exploratory methods such as interviews, surveys, case studies and other relatively personal techniques are normally used (Salkind, 2011:201). Yet, all qualitative approaches have two things in common. Firstly, they focus on phenomena that take place in natural settings, that is, in the "real world" and secondly, they consist of studying those phenomena in all their complexity.

Hendrik *et al*., (2011:9) mention that qualitative research is an approach that permits the researcher to examine people's experiences in detail, by employing a specific set of research methods such as in-depth interviews, focus group discussions, observations, content analysis, visual methods and biographies. Furthermore, Cohen, Manion and Morrison (2011:461) indicate that qualitative research often concentrates on smaller numbers of people than quantitative research, but that the aim of qualitative research is to acquire information-rich data. This study aims therefore to acquire information-rich data from a qualitative sample of participants.

1.8 STUDY POPULATION AND SAMPLE

According to Babbie (2008:121), population is defined as a group of elements or cases be it individuals, objects or events - that conform to specific criteria and about whom conclusions are drawn. The population of this study consists of all Accounting lecturers and repeating first year Accounting students at both campuses of a university of technology in South Africa.

1.8.1 Sampling strategy

Sampling is the process of drawing a number of individual cases from a larger population. The purpose of sampling is to learn something about a large group without having to study every member of that group. Flick (2011:473) agrees that sampling is a selection of cases or materials for the study from a larger population or variety of possibilities. Mertler and Charles (2008:124) describe a sample as a subgroup of people or objects selected to represent the much larger population (in its entirety) from which it is drawn. The most appropriate sampling strategy for this study is purposive sampling as participants are sampled with their distinct knowledge of the problem under study.

Two distinct techniques are used to select a manageable number of participants to be involved in a research project, namely probability and non-probability sampling. According to Cohen *et al.* (2007:92), in probability sampling every member of the population will have a known non-zero probability of selection, while in non-probability units the sample is selected on the basis of personal judgement or convenience. In this study purposive sampling as a non-probability technique is used to ensure that information-rich data is gathered from an informed sample group. According to Ritchie, Lewis, Nicholls and Ormston (2014:65), purposive sampling is based fully on the judgment of the research, in that a sample is composed of elements that contain the most characteristics or representative aspects of the population. The sample for this study consists of five Accounting lecturers of first-year students and 60 first-year Accounting students repeating Financial Accounting 1 from both campuses of a university of technology

The next section deals with the research instruments that are used to gather qualitative data.

1.9 RESEARCH INSTRUMENTS

The qualitative data collection instruments used for this study include open-ended questionnaires and semi-structured interviews.

1.9.1 Questionnaires

Johnson and Christensen (2008:203) points out that questionnaires are self-report data collection instruments that each research participant completes as part of a research study. According to Gray (2010:189), questionnaires are generally regarded as one of the best available instruments for obtaining information from a widely spread source. However, questionnaires have some disadvantages. According to Salkind (2011:140), one of the greatest disadvantages of questionnaires is that the completion and return rate is usually much lower than if face-to-face data gathering was followed. Open-ended questions enable participants to express their views freely on questions

posed to them. In this study, questionnaires consist of open-ended questions to freely provide participants the opportunity to provide their opinions and views.

1.9.2 Interviews

Qualitative interviewing is flexible and dynamic. Semi-structured face-to-face interviews are employed for lecturers taking part in this study. The researcher wants to establish the participants' opinions, views, attitudes and beliefs with regard to the phenomenon under study (Hope, 2011:14). The flexibility of semi-structured qualitative interviewing allows the researcher to probe and gain clarity where necessary during the interview. The researcher asked the promoter and a critical reader to provide professional expertise on the validity of the interview guide.

Silverman (2008:110) asserts that, during interviews a researcher engages in active listening, gaining and maintaining trust, and establishing a rapport with the participants in order to achieve information-rich data. In this study only lecturers are interviewed, with the understanding that they will provide data relevant to this study.

1.10 QUALITATIVE DATA ANALYSIS

Through qualitative research, the researcher is normally confronted with large amounts of information which needs to be scaled or reduced down to manageable data. The researcher then sorts and categorises data so that it becomes manageable to form patterns and themes (Leedy & Ormrod, 2013:45). Lancaster (2005:155) mentions that data analysis is the process of turning data into information. Information is data which is in a form which can be used for explanation, or more specifically for decision making. The way in which data are analysed in qualitative research depends on the research question(s), the way the data is collected and ultimately, what is appropriate to achieve the objectives of the research (Dartington & Scott, 2002:113). According to Chenail (2012:3), a thorough review of the range and depth of the data is an essential starting point for analysis. Such a review is likely to yield a long list of what appear to be important themes and concepts within the data.

Data analysis is what unlocks the information hidden in the raw data and transforms it into something useful or meaningful (Gay, Mills & Airasian, 2009:597). During data analysis the researcher learns whether ideas are confirmed or refuted by empirical reality. Qualitative analysis therefore creates meaning, in part, by using the raw data to learn something more abstract and general. Fade and Swift (2010:107) state that qualitative data analysis takes place throughout the data collection process. As such the researcher constantly reflects on impressions, relationships and connections while collecting data. The search for similarities, differences, categories, themes concepts and ideas form part of the continuous process. In this study, the researcher used themes and categories to analyse qualitative data (See section 5.5).

1.11 ETHICAL CONSIDERATION

The following ethical considerations are taken into cognisance in this study:

- The researcher obtained ethical clearance from the Directorate of Academic Planning and Quality.
- The purpose of the study was explained to participants and were assured that the data collected was only for research purpose.
- Participants were made aware that they can pull out of the study at any given time. They were also made aware that their participation is voluntary.
- The researcher protected participants by making sure that their names are not mentioned anywhere within the study. A detailed discussion of ethical considerations and research methodology are further addressed in chapter 4.

1.12 DELINEATION OF THE STUDY

This study focuses on the field of Accounting Education. Only students who are repeating first year Financial Accounting within the National Higher Certificate in Accounting programme (NHC) and lecturers of these students are sampled to provide information based on their experiences and possible solutions to students' poor academic performance.

1.13 LAYOUT OF CHAPTERS

Chapter 1: This chapter serves as an introduction to the study and contains the introduction and background, the statement of the problem, objectives, as well as an explanation of the research design and method.

Chapter 2: Chapter two focuses on the theoretical framework and conceptual framework depicting concepts such as constructivism and cognitive ability theories.

Chapter 3: This chapter deals with literature regarding the influence of non-cognitive aspects on academic performance.

Chapter 4: This chapter provides a detailed account of the research method implemented in this study. It explains how data is collected and analyzed and reports on the data obtained from the research instruments.

Chapter 5: This chapter covers data presentation, discussion and analysis.

Chapter 6: This chapter discuss the findings of the study.

Chapter 7: This chapter provides findings, conclusions and recommended a strategic guide model to improve the pass rate of first year Accounting students.

1.14 CONCLUSION

Chapter 1 provided the background of the study, the problem being investigated and the objectives of the study. This chapter further clarified the research design and methodology used in this study. The process of sampling, selection of participants, and the place where the study is conducted, research instruments used to collect data and the procedure followed for data analysis were outlined.

CHAPTER 2

THEORETICAL FRAMEWORK, CONSTRUCTIVISM AND THE TEACHING AND LEARNING OF ACCOUNTING

2.1 INTRODUCTION

Chapter One dealt with the structural framework of the study and highlighted the research problem, research objectives and methodology selected for the study. Chapter Two therefore focuses on the scholarship review covering the topic of study. The aim of the study is to design a strategic guide to effectively address poor academic performance of first year Accounting students at a university of technology. For the study to achieve this aim, in this chapter the researcher addresses the theoretical framework guiding the study and links the theory of constructivism and literature on cognitive factors to influence poor academic performance.

2.2 THEORETICAL FRAMEWORK UNDERPINNING THE STUDY

According to Mahlomaholo (2009:224), the theoretical framework directing a study specifies a researcher's beliefs and assumptions that guide and direct the thinking and action of the researcher and participants. It informs the paradigm that contains basic sets of beliefs which inform the interpretations of the study (Morgan, 2007:47). The theoretical lens of the study creates the position through which the researcher views the manner in which to address the research study. It influences how researchers know (epistemology), interpret the nature of reality (ontology), how the researcher and participant's value research (axiology) and influences the process of research (methodology) (Pullen, 2000:126).

This study was guided by critical emancipatory research (CER), which addresses closeness between the researcher and the researched. Participants are not treated as ordinary detached items such as in a natural science laboratory. Participants in CER are treated and handled with appreciation and acknowledgement of equality between them and the researcher. CER sees the participants as other human beings, as equal to the researcher, where the researcher is being tasked with the role of interpreting

other people's interpretations and trying to make sense thereof (Mahlomaholo, 2009:225). Critical emancipatory research is discussed in greater detail in the next sub-section of this study.

2.2.1 Critical Emancipatory Research

CER signifies a paradigm shift from a conventional and positivistic one that places the powerful researcher at the centre of the research, to one that seeks to present collective research ownership (Nkoane, 2013:99). The choice of CER is informed by the researcher's intention to seek not only to study, but also to empower participants (Mahlomaholo, 2009:226). This implies that CER emancipates participants to understand the challenges contributing to their current situation, such as poor academic performance in Accounting. Through CER the researcher elaborates a systematic diagnosis and critique of the world as it exists, visualizing viable alternatives, understanding the obstacles, possibilities and dilemmas of transformation.

The main purpose that CER plays within research is both participatory and collaborative in nature. Emancipatory research can be best understood in the context of the power to act and think independently. According to Mahlomaholo (2009:226), CER can be understood best in the context of the empowerment of individuals. In other words, CER empowers participants so that they can provide solutions to their own problems. In the context of this study, the researcher understands the implications and the direct effects of the application of CER with regard to first year Accounting students. The application of the CER seeks to address the academic problems of students and to find collaborative solutions to such problems. CER empowers the participants to self-critique and discover how they can move towards understanding and tackling the challenges they face (Nkoane, 2010:10). It is acknowledged that CER creates a space for participants to engage in meaningful discussions to provide strategies and contribute to the study for their own benefit (Myende, 2014:28). Participants are afforded an opportunity to discuss their frustrations without fear. More importantly, they are given a platform to address their challenges with the aim of solving such challenges.

2.2.2 The role of the researcher in CER

Within CER, the researcher and participants are involved in the process of changing and recognizing the uniqueness that each party brings to the solution of the problem. CER strives for a participative and collaborative attitude (Shangase, 2013:32). It also allows for other theories such as constructivism to emerge and increases the possibility of interventions that are feasible and appropriate to the participants' needs.

In CER, participants are also accountable for the research outputs which emanate from their engagement. This means that they become participants not informants, subjects and or/recipients of knowledge (Guishard, 2009:86). Furthermore, there is the likelihood that participants together with the researcher can be held accountable for the results of their effort. It is for these reasons that researchers are in favour of socially relevant research that is critically emancipatory. CER does not view reality as being discovered in a detached way but sees participants as co-researchers for whom the problem impacts their lives.

The relationship between the researcher and participants in CER is a very close one, wherein the participants are treated and handled with respect and recognition of equality in the research. In the words of Guishard (2009:85), "…the researcher conducts research in collaboration with and not just on, or for subordinated people". In this manner, the researcher and the participants work collaboratively to combine knowledge and action to create a possibility for social change. CER may predict a form of research that is conducted by those who themselves are involved in education. For this study, interviews are used to ascertain the opinions of those who understand the problem. It is proper that constructivism as a progressive theory of learning is presented for discussion. In constructivism, a strategic guide can be used as an intervention strategy to improve poor Accounting performance in order for students to reach their full academic potential.

According to Powel and Kalina (2009:241), within classrooms where lecturers and students are effectively and optimally communicating, all are influenced by means of constructivist strategies, tools and practices. Furthermore, the researcher employed

the constructivism theory as a strategy towards addressing poor Accounting performance of first year students at a University of Technology.

2.3 CONSTRUCTIVISM

Constructivism theory is grounded in observation and scientific study on how human beings learn and the belief that students ought to be directed when constructing knowledge (Dkhar & Newmei, 2015:39). Constructivism theory is concerned about how students learn and the thinking process linked to such learning, rather than about how they can memorize and recite a quantity of information (Arends & Kilcher, 2012:230). The statement implies that individuals, once confronted with anything new, have a way of reconciling their previous ideas and experience. It is therefore imperative that the expertise of the lecturer in the classroom is critical in constructively aligning new information and students' experiences with objectives and outcomes. Constructivism encourages students to become creators of their own knowledge by linking their experiences with new information presented in the classroom (Töman, Akdeniz, Çimer, Gürbüz, 2013:174). Students do create their own knowledge by asking questions on any task presented. They explore and assess what they know. This also means that it becomes imperative for lecturers to create conditions that reflect autonomous learning.

From Vygotsky's point of view, people construct meaning from reality, and do not passively receive what they are taught in their learning environment (Churcher, Downs & Tewksbury, 2014:35). Therefore, constructivism means that learning involves constructing, creating, inventing, and developing one's own knowledge and meaning through participation in the process of teaching and learning (Bergsteiner & Avery, 2010:30). The implication of this statement is that constructivism does not refute the role played by lecturers in terms of practice and feedback, but allows and provides students more latitude in developing knowledge structures. Constructivism therefore relates to the encouragement of students to use active techniques (such as Accounting exercises, partnerships and manufacturing accounts and real-world problem solving) to create more knowledge. It also implies that students reflect on and talk about what they are doing and how their understanding is changing. Thus, the necessity for providing a classroom that offers such learning experiences at

universities of technology becomes evident. Through constructivism lecturers may be able understand students' pre-existing conceptions or recognition of prior knowledge (Kemp, 2011:46). That would mean understanding students' prior Accounting knowledge, academic achievement, cognitive ability and their learning styles in order to assist them towards academic success.

The seven principles for good practice in education to improve results of undergraduate students were introduced by Chickering and Gamson (1987) in Crews, Wilkinson and Neil (2015:88-89) and are: Encourage contact between students and lecturers; Develop cooperation among students; Encourage active learning; Provide prompt feedback to students; Emphasize time on task - time management; Communicate high expectations; and Respect diverse talents and ways of learning. These seven principles were developed with the aim of improving students' academic performance and building their knowledge constructively.

Having briefly outlined the theory of constructivism, this study elaborates in short on some aspects of constructivism, such as cognitive constructivism, social constructivism, student engagement, classroom activities, zone of proximal development and scaffolding.

2.3.1 Aspects of constructivism

There are two major types of constructivism in the classroom, namely cognitive constructivism relating to Piaget's theory, and social constructivism relating to Vygotsky's theory. They have similarities and differences, which for this study is not discussed in detail - of importance rather is the impact they have on the academic success of students. However, the similarities comprise teaching inquiry methods and students creating concepts on existing knowledge that is relevant and meaningful (Kalpana, 2014:27). That would mean cognitive constructivism focuses on learner-centeredness where students are actively involved in knowledge construction and stimulating the shift towards collaboration inquiry. Differences include language development theory where thinking precedes language for cognitive constructivism and language precedes thinking for the theory of social constructivism (Blake & Pope, 2008:62). It is in this context that understanding communicative tools and strategies

assist lecturers in developing individual learning methods such as discovery learning, and social interactive activities to develop peer collaboration.

Both cognitive and social constructivism perspectives of knowledge construction are considered for this study with an aim of generating realistic answers, assembled from a variety of theories, to address the problems facing first-year Accounting students.

2.3.1.1 Cognitive constructivism

Piaget's greatest contribution to constructive learning came about through the concept of cognitive constructivism (Powell & Kalina, 2009:2). In this way, one would conclude that cognitive constructivism emphasises the notion that people cannot just be given information for immediate consumption, but ought to develop their own knowledge.

Students within the constructivist classroom do not passively replicate the information delivered by lecturers, instead they learn by participating in constructing knowledge (Pitsoe, 2014:394). However, learning and understanding are demonstrated in different ways, such as summarizing ideas and focusing on the development of critical questions – using information obtained from past experiences (Liu & Chen, 2010:65). Knowledge is therefore perceived as being constructed from existing structures other than directly from the environment (Schunk, Pintrich, & Meece, 2008:238). That is, intellectual structures are created out of earlier structures, knowledge is constructed based on experience and background situations, not directly from environmental information. Lecturers should allow for active involvement in learning and social interaction and provide opportunities for students to set their own goals in order to own their knowledge (Schunk, 2012:129). Given a chance to set their own goals, students may be able to improve their academic performance. Pitsoe (2008:136) asserts that the knowledge individuals build is through what they know and also depend on the kinds of past experiences in order to structure such experiences into knowledge. Knowledge can be acquired through involvement with content and relating or linking it with experiences instead of imitation or repetition of what was taught.

2.3.1.2 Social constructivism

Social constructivism is constructive thoughts which embrace the notion that knowledge can be constructed through individual experiences (Reigler, 2012:245). Lev Vygotsky is the father of social constructivism (Powel & Kalina, 2012:242). This type of constructivism was formed parallel to Piaget's cognitive constructivism, and the two paradigms share many similarities. Piaget's theory stresses the student's autonomy in the social environment. In the same context, Powell and Kalina (2009:3) suggest that students achieve through observation and experimentation. Whereas Vygotsky's work emphasizes the impact of social and cultural influences on students, that is the way their varied backgrounds and experiences shape their learning, and the way students understand and interpret concepts (Schreiber & Valle, 2013:2). It is noted that students also achieve through the interaction with knowledgeable members of the community (Rummel, 2008: 80) who can support them to understand the subject content.

The social constructivist perspective puts forward that knowledge is not built by individual learners, but in a broader social context which is linked to learners' environment and cultural activities (Mogashoa, 2014:52). Furthermore, Vygotsky stated that learning does not just take place within the individual, but argued that learning is a social and collaborative activity where people create meaning through their interactions with one another (Schreiber & Valle, 2013:2). Dkhar and Newmei (2015:40) stress the importance of culture, language and social interactions in the process of constructing knowledge and also focusing on the understanding of the context of what occurs in society.

Bell, Urhahne, Schanze and Ploetzner (2010: 351) specify and link social and collaborative learning activities with the following characteristics of social-constructivism towards learning content:

- The emphasis is on connecting mental development and conceptual framework to integrate new and abstract information into content so that students are able to make connections and derive meaning from content. This process aims to

enable students to give reasons on every activity being done and by so doing, enhances logical reasoning.

- Instead of the content being selected and organized around the structure of the discipline, it will be organized around themes, current matters and real-life problems. The curriculum will, in fact, be problem-based rather than discipline-based.
- Science is described as a dynamic discipline that challenges unestablished truth. This implies that science is considered to be practical instead of a set of abstract rules that define reality. Therefore, in essence, this study is seen as a science within the Economic and Management Sciences.
- Learning is perceived as scientific inquiry where new meanings are constructed. Scientific activity is viewed as human and receptive to human perception and interpretation.

The above-mentioned characteristics can also be aligned to some necessary assumptions about social constructivism. The importance of these assumptions towards the learning process are further discussed in the subsequent paragraphs.

Kim (2001:3), as well as Moreeng and Du Toit (2013:51) highlight the following three important assumptions about social constructivism:

- Reality is constructed through human activity: Members of a society together create the properties of the world; for an individual to have knowledge is through the interaction of human beings.
- Knowledge is a human product and is socially and culturally constructed: Individuals create meaning through their interactions with one another, and with the artefacts in their environment.
- Learning is a social process: Meaningful learning takes place when individuals are engaged in social activities.

Social constructivists view these assumptions as social concepts which rely on active human interaction with other individuals and the environment (Kukla, 2000:97). For this reason, constructivists explain learning as individualized, social and occurring

within context, and knowledge is acquired through construction and reconstruction of learning (Kim, 2014:538). Therefore, lecturers (Accounting lecturers in the context of this study) should structure situations such that students become actively involved with content through manipulation of materials and social interaction. It is here that constructivism confirms that what is known and understood among individuals is the consequence of an agreement and sharing of information and ideas about what is viewed as valuable (Moreeng & Du Toit, 2013:51).

The implication of the above-mentioned statement lies in the importance of collaboration and interaction between lecturers, and between students themselves. Through this interaction the lecturer and peers could undertake a role of understanding the Accounting concepts and transactions which lead to improving students' academic performance. It is from this understanding attained in interaction that collaboration is ensured among people in a social setup (Moore, Prentice & McQuestion, 2015:2).

2.3.1.3 Student engagement in the process of learning

The content of Accounting continually requires students to be more engaged in the process by turning the theoretical content into practice. That could be done by forming (through simulation) small businesses within a class to complete different topics, such as partnerships, reconciliation statements (here students can even demonstrate how the actual banks would record and reconcile the books). Classroom activities could involve students' direct participation and prepare them to become problem solvers in the real world. The engagement of students allows them to draw on some of the information gained from previous experiences which allows them to align content with life experiences.

Lecturers are encouraged to discard acting as filters of information where students are absorbers; instead there should be guidance and participative learning (Schunk, 2012:237). The participation and working together of students within groups allows multiple perspectives on the content and multiple representation of reality (Schreiber & Valle, 2013:2). Information is obtained not only from the lecturer, but from other students during group discussions. It is through the process of information sharing and discussion that personal appreciation and cultural differences among students

develops (Liu, Liu, Lee & Magjuka, 2010:179), hence constructivist classrooms are encouraged. Within constructivist classrooms everybody is learning from others and has an opportunity to know how others are solving life problems and the immediate subject problems

2.3.1.4 Constructivist classroom activities

In the constructivist classroom learning content empowers students to become lifelong learners with an emphasis on "learning to learn" (Andrews, 2012:1). Students' construction of knowledge is determined by instructional conditions that stress social interaction (Schunk, 2012:516). For lecturers it is essential to instill a powerful learning environment, as suggested by Moreeng and Du Toit (2013:47), where appropriate instructional conditions are created with considerations of students' experiences and background of the subject. Consequently, students use the foundation of the previous knowledge to construct understanding. Therefore, in a constructivist classroom the lecturer is there to guide and students are responsible to construct their own understanding.

Such experiences and background in the context of this study relate with Accounting terminologies and concepts. Consequently, the instructional suggestion as put forward by Moreeng and Du Toit (2013:47-50) is that the lecturing method should:

- transform from a telling-listening relationship to a complex and interactive relationship; the lecturer presents a problem and provides students the opportunity of solving a task based on their background or experiences;
- consider that students have pre-knowledge and a frame of reference based on experiences;
- incorporate different ways of knowing and allow for different learning styles and expression;
- focus on inquiry and communication, rather than on routine lecturing;
- support open-ended activities, active learning and hypothetical reason;
- create learning experiences rather than present learning content; and devise cooperative learning strategies, foster a collaborative environment and discourage a lecturing-dependent attitude.

The afore-mentioned statements mean that in order to empower students, lecturers need to use a range of processes to convince students of the validity of constructing knowledge about the matters related to Accounting and incorporate them into classroom knowledge. Although the lecturer might still be required to guide students, it is essential that students are presented with contextual problems where they (students) can construct, experience and solve problems by themselves (Biggs, 2011:9). Therefore, it is crucial for lecturers to create an opportunity for students to make meaningful contributions in sharing information and learning from each other. These activities should be designed by lecturers to start from what students can do independently based on prior knowledge, prior experiences, and students learning styles so as to link the already existing knowledge with new concepts (Hattie, 2012:15).

As students continuously work together with others under the supervision of the lecturer, they develop learning skills and abilities to complete Accounting exercises and complete tasks in groups and as individuals. Bay, Bagceci and Cetin (2012:344) state that Vygotsky's supported learning emphasizes a zone of proximal development that represents the difference between what students can do on their own and what they are capable of doing with the assistance of peers.

2.3.1.5 Zone of proximal development

In order to show the potential of the individual to learn, Vygotsky established the concept of the zone of proximal development (ZPD) (Dkhar & Newmei, 2015:41). ZPD is defined as the distance between what the student actually knows and what she/he can learn with the assistance of knowledgeable adults and peers. It is within this zone where a higher level of potential development is determined through problem solving. Consequently, ZPD thus encourages a sequence of inner developmental processes (Dkhar & Newmei, 2015:40), where social interaction is realised on students learning. Moreover, ZPD learning can only be considered good once it encourages development and success of students (Vygotsky, 1978: 89).

Blake and Pope (2008:59) believe that lecturers who can incorporate the theory of Vygotsky into their lecturing strategies will be able to increase student understanding and academic achievement. Vygotsky stated that learning is what leads to the development of higher order thinking (Taber, 2011:4; Blake & Pope, 2008:60). The indication is that ZPD is of particular importance to this study, as it encourages social interaction whereby students can learn from others who may have more knowledge than themselves. This can be of specific importance in Accounting where certain transactions can be explained by peers. The next section deals with scaffolding as a means for effective learning.

2.3.1.6 Scaffolding

In a classroom situation where the aim is to develop high-level thinking, Vygotsky encourages an optimal level of guidance from lecturers and knowledgeable people that can best scaffold students' learning (Taber, 2011:4). This means that students may need assistance as they internalise specific new content of a given task.

Shabani, Khatib and Ebadi (2010:238) advocate that scaffolding is a key feature of effective lecturing and can include modelling a skill, providing hints or cues, and reminders, encouragement or even the breaking down of a problem into steps, or by adapting material or activities. This implies that through scaffolding students employ the skills they have acquired and take progressively more responsibility for their own learning. Through scaffolding students are able to accomplish goals that would be beyond their individual abilities. The lecturers model the desired method and control those components of the task that are beyond the students' competency and demonstrate to the students what is required of them (Kiraly, 2014:4). The implications here could be that learning skills are acquired, the support (scaffolding) is progressively withdrawn, the student is able to focus on and execute those aspects of the undertaking that are within his range of abilities.

Therefore, in scaffolding, the lecturer assists the student in need to move through the ZPD. However, for this gradual withdrawal of support to be successful, there must be an inverse relationship between the lecturer and the student. This entails that students who are new to a learning situation or culture, sometimes are in need of many support

mechanisms in and outside the classroom. Scaffolding is significant to this study because it signals the value of academic assistance provided to students who need it. In order to complement the constructivism framework and its viable theories on intelligence and ability with regard to academic performance, cognitive theories are discussed in this study because of their relevance.

2.4 THEORIES ON COGNITIVE INTELLIGENCE AND ABILITY

The cognitive abilities are seen in the academic domain and research both at the levels of individual and societies as an indicator of successful learning (Rindermann, 2007:668). This statement implies that cognition plays an important role in any successful learning. Furthermore, it could be suggested that intelligence and cognitive development assist in the improvement of students' academic performance.

The theories of cognitive abilities have a high possibility of impacting positively on students' academic performance (Finn, Kraft, West, Leonard, Bish, Martin, Sheridan, Gabriella & Gabrieli, 2014:14). In addition, Spearman's two-factor theory, Guilford's theory structure of intellect (S.I Model) as well as Thurston's theory are cognitive abilities theories that influence students' academic success. When any one of these theories is selected for use or is used in combination with another, successful academic performance can be achieved.

2.4.1 Spearman's two-factor theory

The British psychologist, Charles Edward Spearman, was influenced by the work of Francis Galton on importance of intelligence testing (Williams, Zimmerman, Zumbo & Ross, 2003:1). Galton's work influenced Spearman to develop the theory of cognitive ability (intelligence) in 1904. The proposal of cognitive intelligence of Spearman's theory was made up of a set of different specific components known as *two-factor theory* (Parankimalil, 2014:1). The two-factor theory comprised of general abilities known as the "G-factor" and specific abilities known as "S-factors".

The G-factor relates to abstract thinking which interprets the individual's ability to acquire knowledge, reason abstractly and to adapt to novel situations. Furthermore,

Parankimalil (2014:1) and Pal, Pal and Tourani (2004:182) suggest that the “G” factor theory provides the following helpful characteristics as proposed by Spearman:

- “G” is generally inborn ability
- “G” is universal mental energy
- ”G” is continuous
- The amount of “G” factor differs from individual to individual
- “G” is used in every activity of life, and
- The greater the G-factor in an individual, the higher the possibility to achieve individual success in life.

Based on the above characteristics it might happen that individuals with high “G” factors have a high possibility to succeed in an intellectual task, such as drafting an income statement and balance sheet of a company.

On the other hand, the “S” factor which refers to specific intellectual ability of an individual, possesses the following characteristics:

- “S” factor is learned and acquired within the surroundings
- “S” factor differs from activity to activity done by the same individual.
- People differ in the amount of “S” factor.

Joubert (2010:92) suggests that an individual’s performance in certain subjects can be influenced by the combined results of the general intelligence (*g*) and the specific subject ability (*s*). This implies that when a student performs well in a subject there is a likelihood that “g” and “s” are combined to influence performance. On the other hand, individual performance in any given subject is influenced by some level of specific aptitude for a specific subject represented by the general performance, “g” factor (Parankimalil, 2014:2). Therefore, aptitude for any specific subject can be considered a potential tool that allows an individual to reach a certain level of ability if training and practice had been provided (Joubert, 2010:94). Consequently, continuous practicing and training would enable students to make informed analysis and interpretation of recorded transactions.

2.4.2 Guilford's theory of structure of intellect (S.I model)

In the years 1966 to 1988, Guildford proposed a three dimensional model of intelligence using factor analysis (Pal, Pal & Touran, 2004:182). The model consists of three areas of attention, namely: **content, product** and **process (CPP)**. Concerning the content dimension, different students are said to learn differently in terms of visual information, auditory information, symbolic items, semantic meanings and behavioural information (Barlow, 2000:1). It must be noted that the skilful lecturer must be able to identify appropriate elements of the content dimension in the dimensional model that can enhance academic performance of individual students in the group. By employing either one of the above-mentioned content dimensions, lecturers can advance students' learning.

Culatta (2014:2) reinforces Barlow's insistence on three dimensional models by applying the structure of intellect that comprises the following aspects:

- Contents: Consist of visual, auditory, symbolic, semantic and behavioral aspects;
- Products: Refer to the combination of five units of operations such as cognition, memory, divergent production, convergent production and evaluation; and
- Process: This phase presents the aspect concerning processes such as evaluations, convergent production, divergent production, memory and cognition.

The principles encapsulated by Guilford's SI model are that reasoning and problem-solving skills, which are actually divergent and convergent processes, have distinct abilities that ought to be applied constructively in teaching and learning (Culatta, 2014:2). The SI model goes beyond what normal people would expect of the model by insisting on key problem areas that lecturers should take into consideration. The areas are divided into the following (Sternberg, Bonney, Gabora, Jarvin, Karelitz, & Coffin, 2010:3):

- that lecturers should be sensitive to problems and be able to recognise problems;

- that they must possess fluency such as ideational fluency, associational fluency, and expressional fluency or ability to organise words into compound units – phrases, sentences and paragraphs; and
- that they must be flexible by demonstrating spontaneity and adaptability.

It is important that lecturers realise the extent to which the SI model can be used to advance creativity by implementing the combination of content, product and process which ultimately strengthens the process of “divergent thinking”. Although Spearman used a two-factor model of cognitive intelligence, which relates to abstract thinking and Guilford proposed a three-dimensional model which emphasises content (c), product (p) and process (p), Thurston introduced the concept of mental operations which constitutes a group of abilities. Thurston’s theory is briefly discussed in the next sub-section of this study.

2.4.3 Thurston’s theory

Spearman has proposed two-factor theories model even though his formulation is considered inadequate for the multi-dimensionality of the mental abilities (Thurston, 1934:2). That is why Thurston argues that intelligence activities are not the expression primarily of general factors that permeate all mental activities. In addition, Pal, Pal and Tourani (2004:182) conclude that individuals’ total cognitive ability is dependent on components of intelligence. Some of these components of intelligence are summarised by Joubert (2010:84):

- Verbal comprehension,
- Verbal fluency,
- Numerical, and perceptual speed,
- Inductive reasoning, and special visualization,
- Memory factor deductive reasoning and problem solving ability.

A combination of components of intelligence ought to be mastered by students if successful academic performance is to be achieved. It is therefore reasonable that both Spearman’s general factor theory and Thurston’s theory can be used to achieve the individual ability to accomplish a specific task. However, one has to take note that

Spearman's general factor theory concentrates more on specific factor (S factor) whereas Thurston's is more on the measurements of students' attitudes towards a specific task including cognitive abilities. This statement refers to how students perceive the subject, ability to solve the specific problems as well as to generalise the results correctly after attaining a solution to the problem. It is imperative that students need to acquire and use all the factors as introduced and supported by the prominent theorists. Using these theories in their learning would enhance their cognitive learning and develop their talents.

The next theory discussed relates to the psychologist Jean Piaget's cognitive development theory. This theory also adds to the importance of benchmarking on theories when learning is undertaken. The theory of cognitive development is briefly outlined in the next section of this study.

2.5 COGNITIVE ASPECTS IN ACCOUNTING

Psychologist Jean Piaget is the father of cognitive development theory. Piaget has shown that cognitive growth of children follows a certain specific pattern of development, going through the process of infancy, childhood and adolescence. Piaget also has shown an interest in the intellectual development of children and came to a conclusion that children have their own way of thinking, not that they are less intelligent than adults (Cherry, 2015:2). In the process of interest shown in intellectual development Piaget identified four stages of cognitive development such as the sensorimotor stage, the preoperational stage, the concrete operational stage and the formal operational stage.

The stages give an assumption that cognitive development involves changes in the cognitive process and abilities because as children grow their cognitive structures or schemata are in harmony with their environment (Simatwa, 2010:366). In so doing, students are adjusting to the existing knowledge and form mental structures to a new situation, thus constructing more complex and sophisticated information.

This study focuses on the last stage. This stage involves an increase in logic, the ability to use deductive reasoning, and an understanding of abstract ideas. At this stage a

student is able to think abstractly. They are even able to solve problems (Joubert, 2010:98). In support of Joubert, Cherry (2015:3) indicates that at the formal operational stage students become capable of solving numerous problems and think more scientifically on anything in their environment. Students who are studying Accounting are expected to become abstract thinkers. Therefore, it is imperative for students to think logically and become Accounting problem-solvers.

In the subsection below is a discussion in relation to the concepts, transactions and adjustments which first-year Accounting students may expect to encounter.

2.5.1 Abstract thinking in Accounting

The process of abstract thinking was first tested as ability in cognitive development by Piaget and since then, more development and research in this field was carried out. For example, a study was undertaken at the University of Westminster in 2009 on the concept of abstract thinking by Roberts (2009:1). Roberts investigated the link between the abstraction skills of the students and their academic performance in the relevant discipline. The results of the study indicated that there is a difference in abstraction between male and female students. The study further indicated that males are more inclined to critical thinking and are more analytical than females and by so doing they stand a better chance of performing better academically than female students (Roberts, 2009:1). In support of the findings of Roberts, Jones and Wright (2012:32) indicate that students with high abstract reasoning skills perform far better than those with low thinking skills.

First year accounting students are confronted with abstracting Accounting concepts daily therefore they need to move from perfect concrete thinking to highly abstract thinking in in a challenging subject such as Accounting. This statement could imply that the ability of students to think concretely and abstractly is associated with the ability of the lecturer in Accounting to transfer content to students. In addition, Belias, Sdrolias, Kakkos, Koutiva, and Koustelios (2013:75) argue that Accounting practice has changed and Accounting education (methods, content, concepts) should provide students with the necessary learning skills. Important skills include communication, quantitative analysis, interpersonal and intellectual skills which is necessary,

especially in the first year of study, in order to have an in-depth understanding of the subject. These skills are briefly outlined below.

- **Communication:** communication skills are vital for students' success. Students are expected to interpret, use and communicate Accounting information correctly (Christensen & Rees, 2002:2). Furthermore, Accounting as a subject is not necessarily about journal entries, tax returns or only calculations before a transaction can take place but more about problem analysis and interpretation of theory (Naidoo & Garbharran, 2013:484).

- **Quantitative analysis:** it is vital for students to know how to make a financial analysis in order to use the current data to predict the future. Quantitative analysis in Accounting is to reflect reality on the financial calculations. Students are expected to be competent in analysing and evaluating the situation (Daff, 2009:121). Ratios are practical where calculations are done and students are expected to interpret the calculation. Students must also be able to interpret the calculations critically, and determine how those calculations have an impact on business.

- **Interpersonal skills:** students are expected to interact with others effectively. Accounting as a subject trains students to interact with others effectively when they start working (Daff, 2009:121).

- **Intellectual skills:** Accounting students are expected to be independent thinkers who are problem solvers. They are also expected to interact in situations demanding clear and rational situational thinking (Daff, De Lange & Jackling, 2012:627).

2.5.1.1 Aligning abstract thinking with abstract reasoning

Abstract reasoning refers to the ability of information analysis, patterns detection, relationships and problems solving on a complex, intangible level (Williams, 2004:23). This definition can also be linked to Reinstein and Bayou's (1997:337) application of

Bloom's taxonomy in teaching complex concepts, such as in Accounting. The following summary of the categories in Bloom's taxonomy can be applied:

- Knowledge: students must know common terms, specific facts, basic concepts and principles;
- Comprehension: focuses on understanding facts and principles, mathematical accounting formulas;
- Application: correct application of laws, and theories;
- Analysis: recognise unstated assumptions and logical gaps, and distinguishing between facts and inferences;
- Synthesis: integrate learning from different areas into a new plan to solve problems and formulate new schema; and
- Evaluation: judge logical consistencies of the learning material, how well the data supports the conclusions.

Students would be expected to master the above six categories to confirm that lower- and higher-order thinking and reasoning occur with the implementation of skills practices found in Accounting.

2.5.2 Critical thinking

Critical thinking is defined as a metacognitive process that through purposeful, reflective judgment, increases the chances of producing a logical conclusion to an argument or solution to a problem (Dwyer, Hogan & Stewart, 2014:43). In essence, critical thinking can be understood to mean activation of construction of schema. Alogaili (2012:35) states that critical thinking provides an explanation for activating current schemata and for constructing new ones by contrasting ideas, opinions and engaging in reflective thinking. This statement implies that schemata has a special relationship for both lecturers and students in their reading and/or studying comprehension. This could be so because schemata as a process questions the traditional view that students should learn to reproduce the statements being read in the content. On the same note, Almeida and Franco (2011:1) show that critical thinking is conceptualised as a cognitive capacity that allows an individual to provide meaning

to discharge ideas and opinions, thus capacitating people to meaningful dialogue with others and to experience satisfying feelings both in their personal and social lives.
In an operational sense, critical thinking could be argued as an act of articulation of ideas, meaning elicitation, consideration of different arguments and search of evidence to evaluate the legitimacy of each one as well as justification of personal arguments and beliefs, decision-making, problem solving and monitoring and evaluation of personal cognitions and actions (Almeida & Franco, 2011:2). A study undertaken by Aizikovitsh-Udi and Amit (2011:1087) in Israel at Ben-Gurion University, encourages students to interpret critical thinking in terms of problem solution, high-order skills and content discourse. That is, the students are supposed to actively construct their knowledge and understanding while lecturers function as facilitators by asking questions, posing challenges and assigning investigation tasks. In this situation, students are encouraged to think in deeper ways about different concepts, ideas and solutions to problems.

It must be noted that critical thinking is different from creative thinking. Critical thinking refers to good thinking and not illogical, irrational thinking (Capps & Capps, 2009:1; Facione, 2006:2). The implications here are that Accounting students should be thoughtful at all times when dealing with the content as they are expected to analyse and evaluate Accounting transactions. Additionally, students should not record transactions without remembering, understanding and applying Accounting procedures. Students can learn more effectively once they reflect – rather than merely read – from the top of the page to the bottom (Facione, 2006:2). According to Cohen (2000:2), critical thinking is a skill that is attained by asking questions and answering critical questions about alternative possible states of affairs. This type of questioning and answering is likely to increase the reliability of the overall activity in achieving critical thinking skills.

Yldirim, Özkahraman and Karab Udak (2011:177) define critical thinking as being skillful, responsible thinking that facilitates good judgment because it relies upon criteria, self-correcting and is sensitive to context. Furthermore, they provide three processes of critical thinking, namely: theories of reasoning, theories of critical discussion and theories of the cognitive mechanisms and processes. These theories are briefly discussed in the subsections below.

2.5.2.1 Theories of reasoning

In order to understand the meaning behind theories of reasoning, one is obliged to describe the difference between critical thinking (narrow sense) and creative thinking. Critical thinking refers to a convergent approach to solving problems while creative thinking is divergent (Alogaili, 2011:1). This statement is further elaborated as an introduction to the three types of reasoning inferences namely:

- Deductive inferences as a means of reasoning refers to academic logic being used in a lecture room to deduce meaning from what may be known previously.
- Inductive inferences as a means of reasoning: This type refers to generalising, inferring explanatory conclusions, formulating hypothesis and lastly, giving reasonable assumptions.

2.5.2.2 Theories of critical discussion

In order to study and lecture Accounting, theories of critical discussion must be applied. Aizikovitsh-Udi and Amit (2011:1087) argue that lecturing and studying are very demanding and creative processes that require, among others, deep knowledge and understanding of the content being studied, coping with the unknown on the part of the student and much intellectual effort on the part of the lecturer. In the same context, Evan and Stanovich (2011:227) align theories of critical discussion with the "cognitive skill of proposing a solution to a problem or making something useful or novel from ordinary". For example, a student should be able to formulate content objectives and find innate relationships; that is the capacity to solve problems according to the appropriateness of integrating both the nature of logic-deduction in the content and its evolved concepts into its core.

Almeida and Franco (2011:1-4) insist that lecturers should be aware of the students' beliefs regarding their discussion skills, analyse how their thinking takes form, and support them to unravel and correct their thinking inaccuracies which can be corrected through theories of critical discussion. In other words, lecturers should encourage and emphasise the importance of critical discussion in making students efficient and for them to accomplish set objectives.

2.5.2.3 Theories of cognitive mechanisms

In the 1950s, Piaget provided three cognitive processes which he used to explain how and why cognitive or concept development takes place. Piaget proposed that cognitive growth happens when the learner establishes mental categories referred to as “schemata”. Piaget views schemata as cognitive structures by which individuals intellectually adapt to and organise the environment. Three of these processes, assimilation, accommodation and equilibrium are briefly discussed below (Alogaili, 2011:36):

- Assimilation: This is a continuous process that helps people to absorb or integrate new, incoming stimuli into the existing schemata or concepts. That is, assimilation includes adding new information to old schemata. However, assimilation theoretically does not result in a change of schemata, but it does affect the growth of schemata and it is thus a part of development.

- Accommodation: This is the process of developing new clusters or categories by a child rather than integrating them into existing ones. This implies that accommodation is the way by which children create new schemata or change old ones with new information.

- Equilibrium: Equilibrium refers to a balance between the processes of assimilation and accommodation. For example, it is shown that if a child over assimilates, he/she will end up with a few too large schemata, and will be unable to recognise the differences in things because most things seem similar to him or her. In the opposite extreme, if a child over accommodates, he or she he will have too many small schemata. The over accommodation would at the end prevent him or her from detecting similarities, because all things seem different to him or her.

It is in this manner that this study understands the relationship between the theories of critical thinking and reading comprehension that both need to be aligned in such a

way that knowledge in place and prior knowledge are related. This relationship will assist students to activate prior knowledge. Aizikovitsh-Udi and Amit (2011:1088) reiterate the necessity for students to incorporate induction, deduction, value judging, observation, credibility, assumptions and meaning into their study methods.

Thomas (2010:44) and Seow, Pan, and Tay (2011:7) indicate that critical thinking is highly significant when associated with academic performance. It is therefore reasonable to conclude that those students who score higher on an admission test are more likely to perform well academically in their first year of study. Subsequently, this highlights the importance of students' ability to think critically in order to excel academically.

The next discussion centres on cognitive ability (intelligence) and its influence on academic performance.

2.5.3 Cognitive ability (intelligence)

Michelon (2006:1) defines intelligence as the ability to learn new things, recall information, think rationally, apply knowledge and solve problems as well as the ability to adapt to new conditions and to successfully cope with life situations. This definition implicates that intelligence influences an individual's ability to reason, ague and perceive relationships of concepts or elements in learning. It is for this reason that Accounting students are expected to master this ability. For instance, if an adjustment (either accrued or overdue) is recorded in the books, the student should be able to provide an explanation as to why such an adjustment is recorded, the manner in which it is recorded and what impact it has on the Accounting equation.

It is clear that the ability of students is concerned with all sorts of tasks, but especially those of a cognitive or intellectual nature. Joubert (2010:32) groups' intelligence ability according to the following themes so as to link the tasks that can be performed by an individual based on personal characteristics and qualities:

- Intelligence can change the environment;

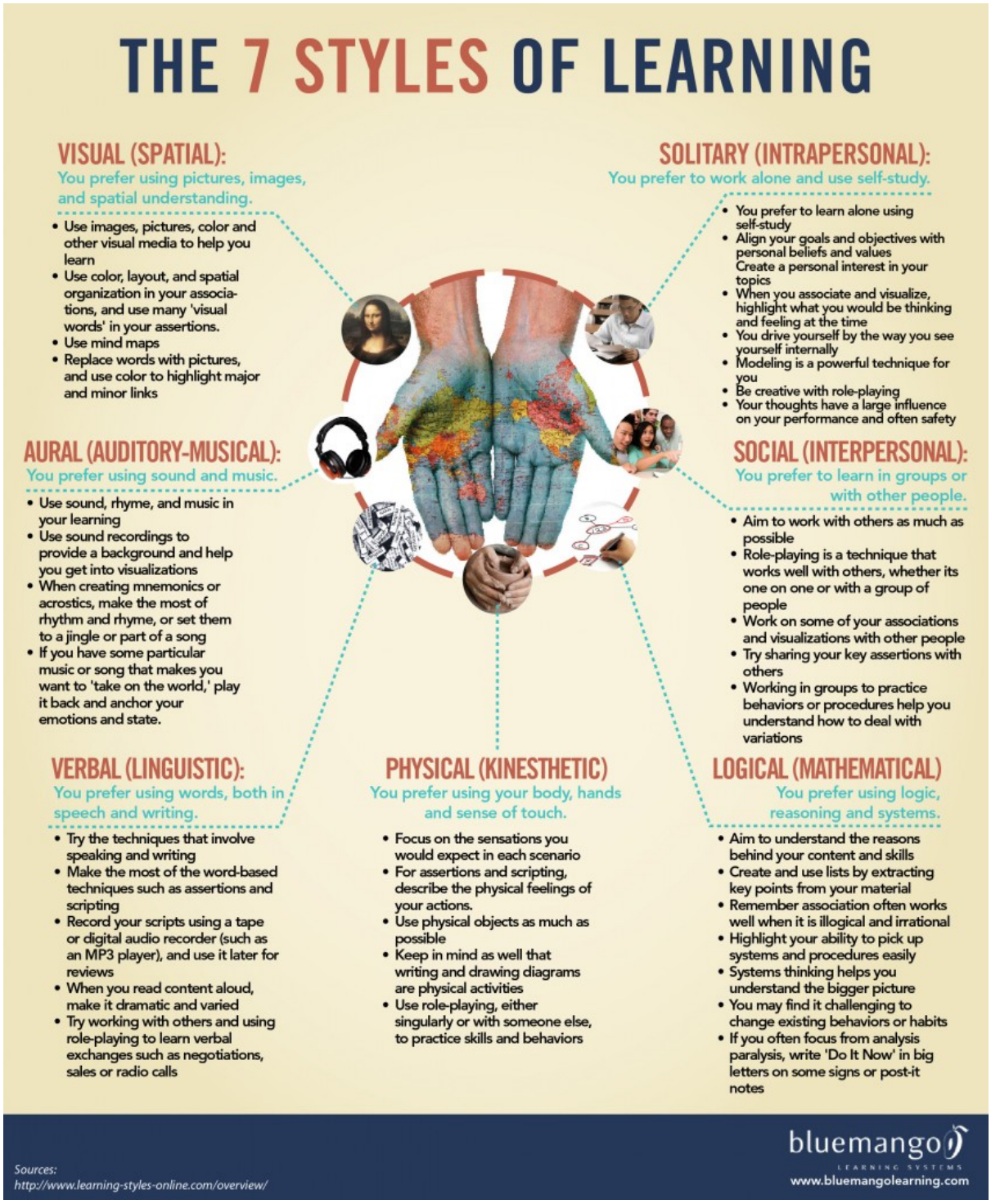
- Intelligence is a driver to study and achievement;
- Intelligence leads to problem solving in different ways: and
- Intelligence is related to abstract concepts.

Therefore, intelligence encompasses a range of aptitudes, skills and talents that every first year Accounting student is expected to possess in order to be academically successful. It is therefore imperative that lecturers should take into account various students' learning styles to advance academic progress. Learning styles are briefly discussed in the next section of this study.

2.6. LEARNING STYLES

According to Arends and Kilcher (2012:42), learning styles refer to the way individuals perceive and process information. On the other hand, Entwistle and Peterson, in Richardson (2010:536), refer to learning styles as a consistent preference for adopting learning processes, no matter the task or problem presented. This describes the different strategies individuals use to learn. That could indicate that students bring different and unique talents and styles of learning into their learning environment. Further indicates that not every person learns in the same way, and as a consequence, students may possess various styles of learning.

Figure 2.1 illustrates various learning styles and indicates the manner in which lecturers can feed their lecturing into these learning styles.



Source: Lepi (2012)

Figure 2.1 indicates that students may prefer to use pictures, images and spatial objects while others may prefer to learn individually and through self-study. Some may prefer to learn in groups while some may prefer to use logic, reasoning and systems. Others may also learn differently through body gestures and a sense of touch or smell while others use words, both written and spoken. The implication of this statement is

that lecturers need to be aware and open to accommodate these learning styles as part of the learning process of students. Not all learning styles can be accommodated all the time, but different learning scenarios need to be created in the lecture room over a period of time to ensure all learning styles are catered for.

- **Visual/spatial:** Students learn through seeing. These students need to see the lecturer's body language and facial expression to completely understand the content of a lesson (Mulhollard & Turnock, 2013:25). Consequently, they prefer sitting at the front of the classroom to avoid visual hindrances (e.g., people's heads). They may think in pictures and learn best from visual presentations, including diagrams, illustrated textbooks, overhead transparencies, videos, flipcharts, and handouts. During a lecture or classroom discussion, visual learners often prefer taking comprehensive notes to absorb the information.

- **Aural/Auditory-Musical:** Students learn through listening. According to Muller (2009:210), this type of student learns best through verbal lectures, discussions, talking things through, and listening to what others have to say. Therefore, auditory students understand the content from a listening approach and thus, written material may provide less helpful value until it is heard. These types of students often gain from reading text aloud and using a tape recorder. In other words, the process of repetition is vital for their learning.

- **Verbal/Linguistic:** Students learn through spoken or written materials and activities are based on reasoning rather than abstract thinking (Logsdon, 2016:1).

- **Physical/Kinesthetic**: Students learn through moving, doing, and touching. They learn best through a hands-on approach, actively discovering the physical world around them (Mulhollard & Turnock, 2013:25). They may find it hard to sit still for long periods and may become side-tracked by their need for activity and investigation.

- **Logical/Mathematical:** Students learn through visual materials and prefer goal-oriented activities based on reasoning rather than less structured, creative activities. They manipulate numbers, quantities and operations as used in Mathematics and also Accounting (Denig, 2004:97).

- **Social/Interpersonal:** Students learn through social contact by interacting with others (Denig, 2004:98). They prefer to work in groups and learn from one another in group discussions.

- **Solitary/Intrapersonal:** Such students learn through own and self-styled learning where the focus is on innate thinking and analysis (Logsdon, 2016:2).

The afore-mentioned learning styles could be influential in deciding the success or failure of students. Therefore, it is for this reason that effective learning should be a process that students can recall without difficulty at any given time. It is well accepted that students differ in learning styles or techniques of learning (Goebel & Humphreys, 2014:34). This is also indicated by Hallin (2014:1444) who affirms that students learn differently at various levels. The statements above show that different learning styles are needed for different students. Additionally, it is necessary for lecturers to realize that students may have different learning styles (Fairclough, 2014:257). All the arguments above indicate the necessity of lecturers in identifying and carefully using different learning styles and/or techniques as they move along in the lecturing process.

Students whose learning styles do not match with the lecturer's teaching method, might not perform well academically. Students can improve their academic performance by knowing and understanding their learning styles and adopting relevant learning techniques. It is for this reason that Tulbure (2012:397) emphasises the importance of learning styles in teaching and learning, also points out that the cognisance of students' differences in learning styles. Consequently, students who are aware of and understand their own learning styles, sometimes use techniques better suited to them, to overcome the mismatch between lecturing styles and their ways of learning. This may improve the academic performance and quality of learning

2.6.1 Active lecturing and learning

Demirbas and Dermirkan (2007:346) define active lecturing as the process whereby knowledge is created through the transferring of experiences. This type of lecturing applies strategies of both lecturer-centered and student-centered approaches (Ganyaupfu, 2013:30). Lecturers must use a combination of recall and transfer of knowledge in the lecturing experience, adapting such recall and transfer to the various learning styles of students.

Students are the producers of the subject information, they talk about what they are learning, write reflectively about it, relate it to past experiences and apply new knowledge to their daily lives. Through active learning students are not just sitting in the lecture room listening to their lecturers and memorising and providing answers (Guven, 2014:2828). Different styles in different situations can encourage students to search for relevant knowledge rather than the lecturer monopolizing the transmission of information to the students. This statement informs that there is more than one correct combination with many variations of active lecturing that lecturers should use to assist students who possess individual learning styles. It must be noted that if students can be presented with the course material in a manner that coincides with their preferred style of learning, more learning will result and students may be more satisfied with their educational experiences (Goebel & Humphreys, 2014:34).

Bristow, Sherpherd, Humphreys and Zeibell (2011:234) mention that the combination of active lecturing, the course material and active learning is a prerequisite for successful learning. This implies that course material needs to follow specific course characteristics as recommended by Liyanage, Gunawardena and Hirakawa (2014):

- Information should adapt to what a student already knows (prior knowledge) or can do (prior skill);
- Information should adapt to a student's learning capabilities;
- Information should adapt to a student's learning preferences or style;
- Information should adapt to a student's performance level and knowledge state (i.e., the system should provide feedback);

- Information should adapt to a student's interests;
- Information should adapt to a student's personal circumstances (i.e., tempo of the lecturing process); and
- Information should adapt to a student's motivation.

However, due to the nature of subject content it would not always be possible to adhere to all the above characteristics. Therefore. lecturers need to investigate ways in which students become involved and interested to learn in the most effective manner. In addition, active lecturing within the constructivism paradigm appeals to students' practical experience by doing and thinking about the solutions on the given task (Eison, 2010:1).

2.6.1.1 The role of interactive learning

Learning occurs as a student interacts with the environment and through the manipulation of education materials, both physical and abstract (Fusaro & Nelson, 2009:57). On the other hand, the recognition of different learning styles calls for lecturers to vary teaching methods and equip themselves with the full range of student-centred teaching (Felder & Brent, 2005: 57). In support of this statement, McChlery and Visser (2009:300) add that the identification of students' characteristics may assist in areas such as improving the course design and designing learning outcomes, in order to make assessment and learning more user-friendly and accessible to students.

The implications of the above-mentioned arguments are that students' characteristics should be taken into consideration as an influencing factor on the course design and learning outcomes. Furthermore, the process of students' engagement with subject content can be encouraged as one of the multitude of lecturing approaches. Students' participation may assist to enhance problem-solving and deep-learning (discussed under 2.7). Furthermore, peer-to-peer learning increases because it enables students to discover, process and apply knowledge through engagement in a well set-up environment (McKinney & Heyl, 2008:179).

Greenhow, Robelia and Hughes (2009:246) assert that multiple participation of students in multiple learning contexts assist in the application, motivation and interactive learning within the formal lectures. This implies that when students participate as a group in finding solutions to the problem, constructive and social learning is enhanced. Also includes peer-to-peer interaction as the focus of constructivist practices engage each other on the subject matter. In constructive classrooms students become active in their learning process as there is flow of engagement, direct self-learning and use of high thinking and quick acquisition of decision making skills through debate and sharing of ideas on problem solving (Deed & Edwards, 2013:289).

2.6.2 Dominant learning styles

- Accommodating learning style

According to Kolb and Kolb (2009:317) students with an accommodating learning style have concrete and abstract experience as dominant learning abilities. Students with this learning style have the ability to learn from primarily "hands-on" experience. They enjoy carrying out plans and involving themselves in new and challenging experiences. Their tendency may be to act on "emotional" feelings rather than on logical analysis.

People with this learning style learn by doing and feeling. Within active experimentation there is a practice of cooperation, being able to work with others constructively. Any task that was done as team work or obtaining information or advice from an expert can be a strategy that may improve the student performance in Accounting.

- Diverging learning styles

An individual with a diverging learning style has concrete experience and reflective observation as dominant learning abilities. People with this learning style are best at viewing concrete situations from many different points of view. The style is labelled "diverging" because a person with it performs better in situations that call for

generation of ideas, such as a "brainstorming" sessions (Felder & Brent, 2005:58).

People with a diverging learning style have broad cultural interests and like to gather information and link it to their experiences. They are interested in people, tend to be imaginative and emotional, have broad cultural interests, and tend to specialize in the arts. In formal learning situations, people with the diverging style prefer to work in groups, to listen with an open mind, and to receive personalized feedback. (Kolb & Kolb, 2009:317). The implication is that students can learn from one another as they reflectively observe and generate possible solutions to an Accounting transaction.

- Assimilating learning styles

An individual with an assimilating learning style has abstract conceptualisation and reflective observation as dominant learning abilities (Kolb & Kolb, 2009:317). People with this learning style are best at understanding a wide range of information and putting it into concise and logical form. Also made it clear that individuals with an assimilating style are less focused on people and more interested in ideas and abstract concepts. Generally, people with this style find it more important that a theory has logical soundness than practical value. The assimilating learning style is important for effectiveness in the conceptualisation of the Accounting principles, information and models.

- Converging learning style

In formal learning situations, people with this style prefer readings, lectures, exploring analytical models, and having time to think things through (Pacalo, 2014:16-19). An individual with a converging style has abstract conceptualisation and active experimentation as dominant learning abilities. People with this learning style are best at finding practical uses for ideas and theories. They have the ability to solve problems and make decisions based on finding solutions to questions. An individual with a converging learning style prefers to deal with technical tasks and problems rather than with social and interpersonal issues. In formal learning situations, people with this style prefer to experiment with new ideas, simulations, assignments, and practical applications. The practical nature of Accounting lends itself to the converging learning style when students find solutions to problems given.

Apart from learning styles, there are four main learning approaches through which students learn. These are discussed in the next section of this study.

2.7 LEARNING APPROACHES

Learning approaches are more flexible than learning styles and can adapt to the context and requirements of the task at hand to meet the more specific or particular objectives intended. With learning approaches, each person tends to use one approach or another, but the interaction between the person and the situation implies that it may adapt its operation to the most relevant approach to perform the task properly (Veloo, Krishnasamy & Harun, 2015:46).

Learning approaches refer to improving the quality of learning and efficiency of learning (Biggs, 2011:16). Therefore, it is not sufficient for a pedagogical theory simply to explain how people learn, but it also has to provide clear indications about how to improve the quality and efficiency of learning (Entwistle, 2009:17). It is imperative to understand that learning approaches are mostly focused on the intended outcome. That means understanding how students learn and also how to improve their learning, would assist lecturers in effective planning of their lectures.

A planned learning approach should involve students in the initial planning process. It must be an inclusive engagement in which students are active participants in what they are expected to learn (Joubert, 2010:36). However, it must also be noted that there is a difference between students who perceive learning as involving information storage and reproduction, and those who try to draw their own meaning in order to transform the material provided (Bran, 2010:231). In other words, students have different preferences for a certain specific approach. Students become aware of the influence of the learning context, in terms of what and how to learn in order to improve their results.

Mazlum, Cheraghi and Dasta (2015:308) describe learning approaches as a way students relate to a learning task, cooperation and interaction with peers and lecturers. Biggs, Kember and Leung (2001:137) refer to an approach to learning as the nature

of the relationship between student, context and task. These authors indicate the necessity of participation of students when constructing and developing new knowledge.

Much focus has been placed on learning approaches in higher education with regard to improving students' performance (Williams & Williams, 2010:11; Barac, 2012:53). In this study, four approaches, namely deep-learning, surface-learning; problem-based learning and strategic-learning are discussed as they are considered to be most appropriate for this study in improving first year Accounting academic performance.

2.7.1 Deep-learning approach

Donnison and Penn-Edwards (2012:11) define the deep-learning approach as a complex personal development process involving the change of perceptions, learning habits and epistemological beliefs. It means that the deep-learning approach appeals to meaningful engagement in every task that a student embarks upon (Flood & Wilson, 2008:227). Although some first-year students may be urged to use the deep-learning approach at university, this may be hampered by their reflection and use of surface learning acquired at school level. Hence it is important that first-year students demonstrate total commitment and inspiration to the deep- learning approach.

The advantages of the deep-learning approach centre around achieving meaningful learning, focusing on underlying content and concepts as well as grasping the main ideas, themes and principles without difficulty (Hall, Ramsay & Raven, 2004:6). Therefore, practice on learning material will eventually yield mastery and understanding (Donnison & Penn-Edwards, 2012:12). Consequently, students will relate their study material to existing experiences and ideas and thus make academic reflections of what they learned previously.

Students who engage with deep-learning possess the following characteristics, which strengthens their intentions of understanding, engaging with, operating in and valuing the subject (Garrison & Kanuka, 2004:96) Such students are:

- striving to understand material for themselves;

- interacting vigorously and critically with content;
- relating ideas to previous knowledge and experience;
- using organising principles to integrate ideas;
- examining the logic of arguments; and
- studying beyond the course requirements.

Therefore, with the deep-learning approach, students are comfortable to utilize critical thinking skills, look for meaning in the course content and constructively try to relate it to personal experiences and ideas (Duff & McKinstry, 2007:212). The deep-learning approach can be associated with selfless life goals and is directed towards comprehending (Anthony & Wormald, 2014:27). Considering the above characteristics, the deep-learning approach provides students with excellent opportunities to achieve academically. Therefore, the enjoyment leads to effortful cognitive activity, students further enjoy the process of information acquisition that would help them to solve complex problems in future (Wang, 2013:3).

It is imperative that lecturers aim to provide students with opportunities to become deep learners and enable students to engage meaningfully with their academic tasks. It is believed that students' perceptions of the learning environment influence their learning approaches. Students' perceptions of the learning environment are more significant than the learning environment itself since such perceptions regulate their learning approaches. To amend students' learning approaches one would not try to change the students, one would rather seek to change their experiences or perceptions of their learning environment. Learning environments focused on problem-solving encourage deep-learning approaches (Mazlum *et al*., 2015:308-309).

However, Anthony and Wormald (2014:28) argue that in South Africa, students' workload imposes a challenge for them to adopt a deep-learning approach, as the curriculum to be covered in an allocated time is extensive. Therefore, analytical and conceptual thinking skills may not be achieved unless students are encouraged to assume the deep-learning approach (Hall *et al*., 2004:490). Creating responsiveness to an appropriate learning approach could result in the use of original teaching and learning strategies in higher education. It could also assist in improving the value of

learning and teaching in higher education and therefore lessen the predicament of high failure and dropout rates. Students' awareness of their learning approach can empower them to be self-confident and effective in their learning so that they persist and be successful in their academic studies.

2.7.2 Surface-learning approach

A surface approach to learning is characterised by a desire to attain the required knowledge and facts only to finish the work allocated to pass the subject successfully (Anthony & Wormald, 2014:28). Therefore, students rely on memorising, reproducing and recalling or remembering the content taught (Flood & Wilson, 2008:227). Subsequently, students do not engage in a deep connection, analysis and interpretation of the learning content, rather routine memorisation of the subject matter that students expect to be assessed on, with resultant reduced quality outcomes (Barac, 2012:52). The characteristics of surface approach describe students' inclination to obtain the material without asking in-depth questions, to concentrate on rote-learning and duplication of knowledge with a superficial attempt to assimilate information, to relate to nominal aspects of material, and to be apprehensive with the time necessary to complete the learning task (Biggs, 1993).

Many first-year students, irrespective of the qualification they study for, embrace surface approaches to learning. This may be because they arrive with knowledge beliefs that originate from their preceding learning experience at school and view learning as the passive engagement with external information derived from their lecturers and their textbooks. First year students are more likely to embrace surface approaches to learning than mature age students and a surface approach to learning was found to show a relationship with lower marks obtained by such students (Donnison & Penn-Edwards, 2012:11). Lecturers can also introduce problem-based learning through activities in order to improve the academic performance of first-year Accounting students.

2.7.3 Problem-based learning approach

Problem-based learning (PBL) can be described as a process of learning where students are organised through the process of learning facilitation, but not taught. They are supervised by a qualified facilitator who is a member of staff and whose job is to guide and advise on the learning path or track (Wood, 2008:2). The advantages of problem-based learning is that it embraces the principles of learning practice and is student-based in nature (Sada, Mohd, Adnan & Yusri, 2016:360). It can also provide the basis for diagnostic assessment during feedback as well as gauging the benefits of experiential learning. Jacobs, Vakalisa and Gawe (2011:36) explain experiential learning as the major point of departure in which a student will acquire knowledge through innate and distinctive experience.

This type of experience can be aligned to the process of problem-based learning whereby students interact with his/her environment. The interaction leads to participative learning where students are free to ask questions. In participative learning lecturers develop a culture of learning where students become part of the process of planning and implementation of the learning process (Jacobs *et al*., 2011: 12).

The learning experiences in PBL start with an essential questioning method to illustrate the self-directed learning and cooperative grouping processes (Wood, 2008:2). Consequently, students would be asked to formulate small groups, whereby they would be presented with a problem to solve. Therefore, the lecturers are expected to facilitate, guide and advise students to solve the problem. Problem-based learning brings effectiveness, efficiency and encourages students to go out and conduct research about the problem at hand (Meyer, 2010:200). When the group reconvenes after research, students deliberate their findings and agree on a way forward to solve the problem. The process of finding the solution to the problem provides students the upper hand of being able to solve and dominate their subject content (Entwistle, 2009:23).

Students will also develop skills in problem solving and use their cognitive abilities to attain self-concept and perception. Therefore, using the problem-based learning approach is beneficial to both students and lecturers because they all reap positive

effects in the process of lecturing and learning. Consequently, problem-based learning allows lecturers to draw on a variety of students' experiences and understanding, both in their own disciplines and in their personal life (Wang, Li, Pang, Liang & Su, 2013:2). This method is considered to be a critical tool which can be made use of by lecturers and students for academic achievement for lifelong learning. Accounting, with its practical application nature, lends itself perfectly to problem-based learning.

2.7.4 Strategic approach to learning

Donnison and Penn-Edwards (2012:11) refer to the strategic learning approach as the achieving approach, as students who are engaged in this approach put effort into their organised studying. Therefore, any academic task undertaken by the students are influenced by the aim to achieve and as a consequence, the achievement is influenced by exerting more effort towards the content of a subject (Barac, 2012:52). Furthermore, the strategic learning approach enables students to achieve a high level of performance through the use of organised methods of study and time management (Valadas, Gonçalves & Faısca, 2010:262). On the same note, Flood and Wilson (2008:228) further indicate that students should concentrate more on previous examination papers as a re-enforcement for their preparation for summative evaluations. This approach may lead to students' academic success. Lublin (2003:4) outlines the characteristics of the strategic learning approach as follows:

- Providing steady effort into learning and studying: This statement implies that lecturers should guide students into taking one step at a time into their learning process by planning, managing and controlling their learning;
- Looking for the right conditions and materials: Students should know when, what and under which conditions to learn so that deep learning can be achieved;
- Planning to put time and effort to maximum effect: Students must learn how to use their time and effort fruitfully and timeously (time management);
- Knowing the necessities and criteria of assessment: Students should be exposed to the types, structure or format and the schedules of assessment. Assessment techniques must also be mastered.

- Connecting work to the preferences of learners: It is the work of both the lecturers and students that students' content materials and assessment methods are planned and executed in a user-friendly manner.

Lecturers may differ when it comes to setting examination questions in that lecturers ask questions of differing levels of complexity. An approach to learning is not fixed and stable, because an approach only indicates a tendency of students towards learning (Biggs, 2011:17). Different lecturing contexts and tasks may influence how the students will react. Considering different teaching contexts, it is difficult to predict student performance only on the basis of the tendency towards a specific learning approach.

The above-mentioned learning approaches can be useful tools in improving students' Accounting performance in alignment with strategy guides for lecturing Accounting. The strategy guides for lecturing Accounting at first year of study are discussed in the section below.

2.8 STRATEGIC GUIDELINES/PROCESSES FOR ACCOUNTING LECTURING IN THE FIRST YEAR

Leone, Wilson and Mulcahy (2010:2-10) provide the following strategic guidelines/processes for improving Accounting instruction for first-year students at institutions of higher learning.

- Promoting student participation and a classroom environment conductive to learning.

The goal of Accounting instruction at university level should be threefold: Firstly, rapidly improving students' foundational Accounting skills, procedural fluency and conceptual understanding. Secondly, providing access to grade-appropriate Accounting concepts and constructs and thirdly, instilling Accounting competence and confidence in students who encountered or were exposed to main gaps and lags in instruction and years of failure in Accounting (Akiri, 2014:117).

- Using non-formal and formal channels to learn about and involve students

In order to build a sense of classroom situation that is conducive to lecturing, it is imperative for lecturers and other academic staff to engage students. However, lecturers might be expected to know and understand the interests, experiences, and educational backgrounds of the students when they enter university for the first time. Lecturers who show their students that they are real people who care about them, can assist in the building of a trusting and involving atmosphere for students.

- Developing a classroom condition focused on high expectations for Accounting

All students should be required to master the goals that are delineated and outlined in the curriculum standards, thus establishing uniform standards of expectations. In addition, students need to be afforded all possible academic support to realize the high levels of achievement required at university level. For example, language can be used as a powerful instrument for informing and communicating all relevant expectations for student achievement and behaviour. Additionally, Garcia and Safadi (2014:383) believe that strategic processes should be systematic instructions meant to promote students' progress in an area of study that students perceive as difficult. These strategic processes should be seen to be interventionist in nature and must possess specific and measurable objectives. These strategies will only be successful when lecturers adopt information dissemination in ways that represent various ways students learn. Hence it is agreed that personality-centred, cognitive-centred and learning-centred strategy guides are effective for lecturing and learning of Accounting in the first year of study (Fayombo, 2015:47).

- Using games and constructive competition to practice and review Accounting skills

Building and providing spaces where students can be competitive in constructive ways can be an engaging motivational instrument. Games are key in acquisition of Accounting skills or to evaluate such skills. Lecturers may consider applying the rules of popular sports games in addressing the complexity of Accounting concepts and/or constructs. On the other hand, students could be placed to work in groups to represent and solve Accounting problems.

- Use guided and independent practice to review acquired Accounting skills

Guided practice helps Accounting students to demonstrate and check their understanding and conceptualisation of the content; while lecturer direction gradually decreases to encourage students to take increasing responsibility for learning and practice. In Kenya, studies conducted by Katamei and Omwono (2015) at the School of Economics at the Catholic University of Eastern Africa point out that in addition to having channelled an independent practice time during class, students at university level should be expected to complete homework that serves as additional independent practice of skills developed during lecture time.

The mentioned strategic guide processes should be implemented in improving students' Accounting performance and reducing of negative factors impacting on students' performance. Factors impacting Accounting performance are discussed in the next section.

2.9 FACTORS IMPACTING ON ACCOUNTING ACADEMIC PERFORMANCE

There are many factors that may impact the academic performance of first-year Accounting students. What follows is a discussion of some of the factors impacting on academic performance (such as in Accounting).

2.9.1 English as language of instruction

English is used as the language of instruction in lecturing and learning in the majority of educational institutions worldwide (Vu & Burns, 2014:43). English being used as an academic language has taken precedence over students' mother tongue (O'Neill & Theuri, 2007:1). The academic success of students is affected by a number of factors, of which one is the language of instruction. The level of command of the language of instruction can negatively impact on academic performance as students may experience problems in comprehending the essential basic concepts that are taught in various subjects. This language problem could cause certain students to decide to memorise and regurgitate information, which leads to some degree of success when solving examination questions that entail analytical approaches based on understanding the basic concepts involved (Nyika, 2015:2).

Manson (2014:30) agrees and states that in South Africa, the language problem in higher education is perceived to impact greatly on the academic performance of students, as English and communication skills are regarded as critical for academic success. The English proficiency of non-English mother tongue first-year university students is often weak and in many instances have no linguistic competence, no cognitive skills and no ability to read critically. Such first-year students are generally inadequately prepared for higher education which directly affects their academic performance and reading-to-learn ability (Nnedu, 2009:93).

Not only do students perform poorly in Accounting due to the lack of English language proficiency, Pule (2015:23) further points out that the understanding and interpretation of Accounting terminology have an impact on the answering of questions during tests and examinations. The effects of the language of instruction on learning can have negative connotations for students if such students possess only Basic Interpersonal Communicative Skills (BICS) and lack the ability to initiate the services of Cognitive Academic Language Proficiency (CALP).

The distinction between BICS and CALP was presented by Cummins in the late 1970s in order to draw the attention of educators to the challenges that second language English students experience in academic aspects of the language of instruction. BICS implies the day-to-day English usage in social situations. CALP refers to the formal academic learning and consists of elements such as listening, speaking, reading and writing about subject area content material (Cummins, 2008:72). The explanation from Cummins implies that it is imperative that students must master the level of academic English used in classrooms.

Research suggests that while language learning is part of learning for all students, the distance between the languages of academic institutions tends to be greater for students who come from homes where the language and literacy practices are different from those needed for school reading and learning. Discrepancies between ways of using language at home and at academic institutions have been documented, in particular for students who speak a different language at home and/or those who do not come from literacy-rich environments (Cummins, 2014:148). Students are

expected to interpret and analyse Accounting statements with clarity and competence (Sekhukhune, 2006:58-59). If students cannot understand what is required of them in a test or examination, knowledge cannot be achieved (Fourie, 2006:78).

A study conducted in South Africa by Koh and Kriel (2005:227) investigated the language related skills needed for academic success in Accounting. The study indicated that English as language of learning seemed to be a contributing factor to the drop-out rate of first-year Accounting students. This statement was reinforced by the results in Accounting reports which indicated that students who have difficulty solving Accounting problems lacked effective listening, reading and writing skills. Barnes *et al.* (2009:42) have the same sentiment that the difficulty of solving problems is influenced by lack of reading skills, understanding and lack of application of knowledge.

On the other hand, Joubert (2010:41) argues that English proficiency may therefore influence students' performance in Accounting only up to a specific point. Students who are proficient in English, but who lack problem-solving skills still find it difficult to perform as expected in Accounting. Students who possess problem-solving skills and are also proficient in English are more likely to succeed in Accounting because they possess academic dimensions (CALP) of the language of instruction.

2.9.2 Previous Accounting knowledge

Subject background, knowledge and the grade percentage obtained are significant factors that determines the future academic performance of a student (Al-Mutairi, 2010:148). Steenkamp *et al*. (2009:116) postulate that background knowledge, personal experiences, evaluation and continuous interaction with lecturers increase students' prospects of academic success in Accounting. Several authors, Arquero, Byrne, Flood and Gonzalez (2009:278), Dolado and Morales (2009: 197) and Jones-White, Radeliffe, Huesman and Kellogg (2010:156) have highlighted, through research in different areas of knowledge, that students' prior knowledge is one of the most significant factors influencing learning outcomes. Therefore, students can structure prior knowledge into conceptual knowledge and metacognitive knowledge.

Conceptual knowledge includes facts, values, rules, outlines and basic skills which the student may have attained during secondary school education. Garkaz, Banimahd and Esmaeili, (2011:123) confirm that students who studied Accounting at high school and had good scholastic aptitude enjoy better marks than those who did not do Accounting at high school level. Therefore, the implication is that there is a positive relationship between prior Accounting knowledge and academic performance in first-year Accounting.

Worldwide, universities admit and enrol students based on certain admission policies (Joubert, 2010:41; Liu & Chen, 2010:63). Admission policies (such as a points scale) and other prerequisites are considered as measurement of students' prior academic performance and serve as an important indicator to determine the student's future academic performance (Ali & Ali, 2011:141). In actual fact, the percentage marks that students obtained in their final year of schooling is the measuring scale for their admission for first-year enrolment at universities.

Apart from previous knowledge of Accounting and the marks obtained, Mathematics seems to be a contributing factor in the academic success of Accounting students.

2.9.3 The influence of Mathematics

Accounting is subjected to quantitative accuracy and numerical measurements and skills. (Al-Twaijry, 2010: 321) indicates that Accounting skills are closely related to arithmetic skills; however, many students in their first year are without arithmetic literacy. Joubert (2010:45) states that mathematics or arithmetical literacy is a pre-requisite for students admitted into Accounting programmes. To address arithmetic literacy, some universities intervene by introducing commercial mathematics as a prerequisite for an individual to be admitted into the Accounting programme (Pule, 2015:29).

Accounting students should be knowledgeable in mathematics in general and with numbers in particular (Yunker, Yunker & Krull, 2009:1). Therefore, it becomes reasonable that mathematics is being singled out as a determining success factor in Accounting (Papageorgiou & Halabi, 2014:220; Yunker *et al.,* 2009:2; Al-Twaijry,

2010: 321). Hence students admitted for Accounting programmes must have at least passed mathematical literacy in their last year of schooling as a prerequisite for admission.

Furthermore, Yunker, *et at.* (2009), in their findings indicate that students with strong mathematical proficiency perform significantly better in an Accountancy programme than those without such a background. This also implies once more that good mathematical or numerical knowledge serves as a driver for success in Accounting. In light of the above statements, it becomes reasonable to conclude that a lack of mathematical and/or numeric values may hamper transference of certain Accounting concepts and calculations of percentages and adjustments.

Sekhuhkune (2006:86) suggests that strict measures when admitting students in the first year should be taken. If a student does not have any of the prerequisites, he/she should not be admitted in order to avoid high failure rate and minimise long-time residence within one level. A study conducted by Seow, Pan and Tay (2011:18) at Singapore Management University (SMU) suggests that mathematical aptitude may be regarded as necessary, but not essential for ensuring academic achievement. The argument could be that both Accounting and Mathematics require a heavy reliance on numbers. Mathematics could assist students to explain why the elements of expenses and assets should receive the same treatment in relation to credits and debits. Therefore, mathematical logic enables students to demonstrate the rules of debits and credits and the process of including adjusting entries either on the debit or credit of an account. Although mathematics may not be considered to be a prerequisite for Accounting studies, it does seem that sufficient evidence exists that it contributes positively towards Accounting performance.

2.10 CONCLUSION

Chapter two reflected on the literature relating to the topic of study and found that the most influential factors that may affect progress of first-year Accounting students must be taken care of by lecturers. It is also imperative that students who enrol for Accounting related subjects should at least possess prior knowledge of the subject for him/her to be able to engage with the content at university level. Various lecturing

methods and strategies such as the introduction of deep learning versus surface learning, problem-based learning and problem-centred approach are key to reflective learning.

There are various cognitive factors identified that may influence first year Accounting students. These factors are presented, discussed and evaluated in this chapter. Theoretically, such factors are embedded in theories presented in this chapter, namely:

- Critical emancipatory theory;
- Constructivist theories;
- Theories of cognitive development and ability; and
- Kolb's Experiential Learning Model.

It is imperative that lecturers and students understand and effect the application of these theories effectively in their lecturing and learning processes. Failure to adhere to the requirements of these theories may retard academic progress of first-year Accounting students. It is for this reason that this study regards cognitive factors as a key influence in students' Accounting performance.

The chapter indicates the importance of variation of learning approaches which in essence are vital for students. Learning approaches are regarded as vital pillars of the education process with specific reference to the methodology of lecturing. Lecturers must therefore take cognisance of the authority of the role played by deep learning, surface learning, problem-based learning and strategic learning approaches in the students' learning process, and the way each of the approaches impacts on students' academic performance and ability. Language is also seen as a factor that, if not implemented with caution and efficiency can impact negatively on Accounting students at first-year level.

CHAPTER 3

NON-COGNITIVE FACTORS AND ACCOUNTING ACHIEVEMENT

3.1 INTRODUCTION

This chapter focuses on the influence of non-cognitive factors on the academic success of students (and more specifically on first-year Accounting students as the context of this study). Understanding these associated factors in relation to success or failure is considered by Byrne, Flood and Wills, (2009:160) as essential.

The education support intervention systems are basically introduced by institutional management to improve students' academic performance (OECD, 2008:1). Universities also need to put in place interventions that will enable students to settle and focus on their studies. The more the lecturers can understand non-cognitive factors as discussed in this chapter, the more first-year students can be supported and well advised.

There is little literature on non-cognitive factors that is specifically related to Accounting. However, variables discussed below seem to impact all students in all faculties. The literature focusing on the impact of non-cognitive factors with specific reference to first-year students was considered for this study. Variables such as biographic, socioeconomic, personal and institutional factors are all discussed in this chapter under the umbrella of non-cognitive factors that may influence successful academic performance.

3.2 NON-COGNITIVE FACTORS

For students to perform well academically, both cognitive (see 2.6) and non-cognitive factors play a major role (Farrington, Roderick, Allensworth, Nagaoka, Keyes, Johnson & Beechum, 2012:46). Elements such as content knowledge and academic skills are prerequisites for students to develop sets of personal behaviours, personal skills, personal attitudes, and strategies that are vital to academic performance (Farrington, Roderick, Allensworth, Nagaoka, Keyes, Johnson & Beechum, 2012:2).

Figure 3.1: Conceptual Framework of this chapter

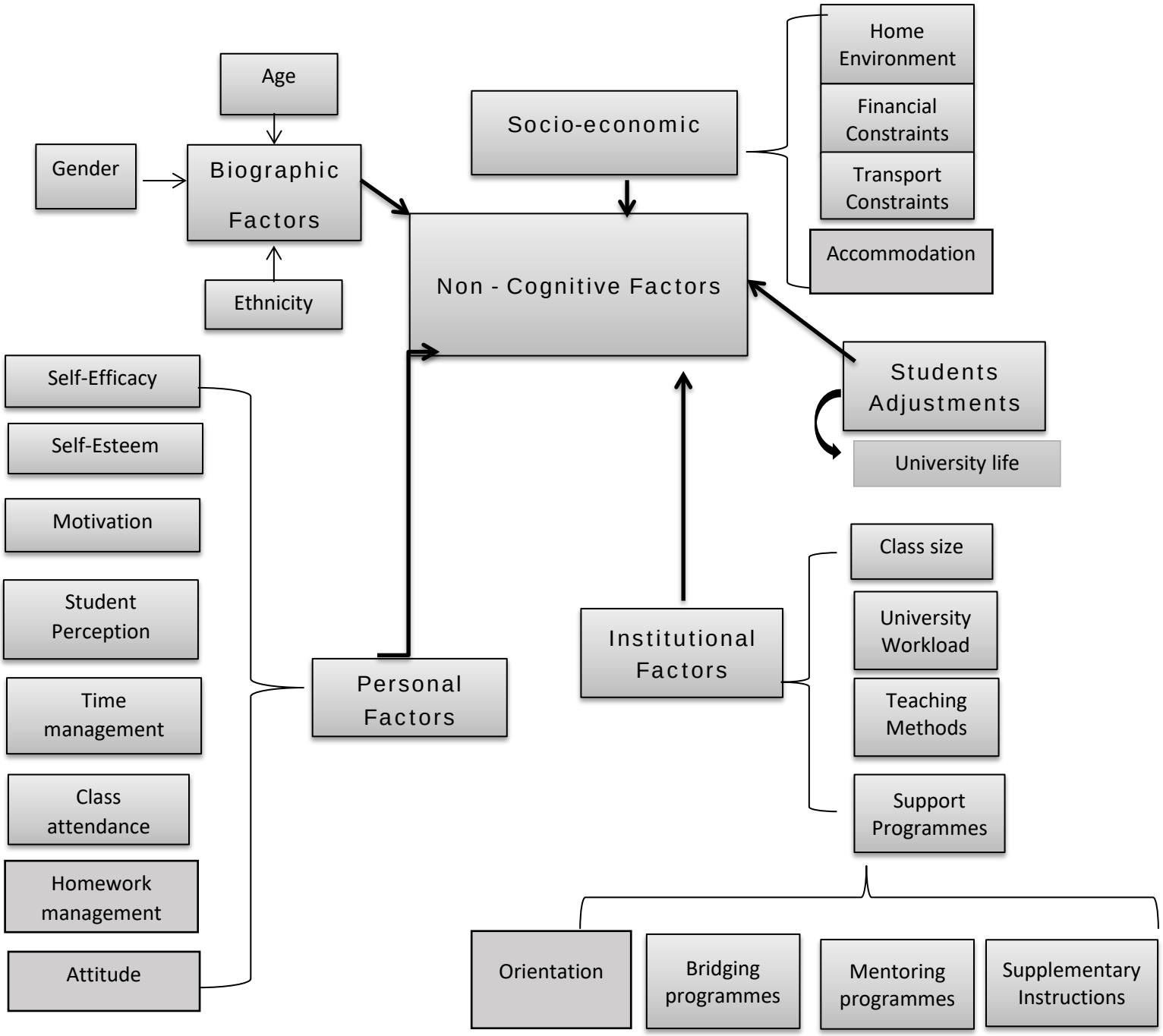


Figure 3.1 illustrates the relationship between academic performance and related factors which are non-cognitive in nature. The influence and the impact of the non-cognitive factors on academic performance are discussed in the following sub-sections.

The following sections elaborate on non-cognitive factors and their relation to academic achievement.

3.3 BIOGRAPHIC FACTORS

The biographic variables which are found to be most influential on academic performance are age, gender and student's ethnicity (McKenzie, & Schweitzer, 2001:12).

3.3.1 Age and Accounting performance

Age as a factor of first-year Accounting performance at the universities indicates contradictory and sometimes inconsistent results. Joubert (2010:166) in their research findings affirm that students at a younger age generally perform better in Accounting studies. Du Plessis, Müller, and Prinsloo (2005:696) specify the age limits of 17 to 30 years as students who are more likely to succeed in Accounting than their counterparts older than 30 years. The rationale is that matured students may have family responsibilities and work related issues which prevent them from having enough time for their studies. The assumption would be that the younger students are only focusing on their studies as their main responsibility. Another reason could be that younger students have just graduated from high school and the information is still fresh and more recent (Suleiman & Mohezar, 2006:329).

Contrary to the above findings, a student's age was established to be associated with degree performance by Barrow, Reilly and Woodfield (2009) where it is found that mature students marginally achieve better degree outcomes. Cheesman, Simpson and Wint (2006:19) confirm that mature students do outperform young students with the indication that mature students are able to manage their academic life and external life more professionally. However, the degree of achievement as compared to young students is marginal.

According to Ebenuwa-Okoh (2010:99), the more an individual's age increases, the more one becomes wiser and shows maturity. In order to strengthen the above argument, Nyikahadzoi, Matamande, Taderera, and Mandimika (2013:4), in a study

conducted at the University of Zimbabwe indicate that students who are 25 years of age and above are wiser and more mature. In South Africa also, a 21-year-old person is considered to be mature enough to act responsibly in all spheres of life. Mlambo (2011:85) is of the opinion that academically, mature students possess basic skills essential for effective study. However mature students may not be as intellectually competent as young students due to being unfamiliar with the latest subject content or new developments in the field of study. Mlambo (2011:84) further argues that mature students generally adopt the deep learning approach to make meaning with academic content, whereas younger students apply surface approach to learning more often.

Kirk and Spector (2006:100) did not find any significant relationship between age and academic performance of first-year Accounting students. Results are inconclusive because other variables need to be taken into consideration, such as students' motivation, commitment, preparedness, subject matter, gender and learning approaches. The gender of students is discussed in the following sub-section.

3.3.2 Gender and Accounting performance

Research findings on the relationship between gender and academic performance in general and in Accounting in particular found that female students perform better than their male counterparts (Smith, 2004; Joubert, 2010). The study conducted by Joubert (2010) at a South African university found that gender has a significant impact on the performance of first-year Accounting students. The findings revealed that a p-value of 0.0157 was obtained; upon further analysis, the researcher found that female students perform better than male students when analysing results by least square mean (LSMean) and Univariate analysis. That indicates 46.5 for females and 41.8 for male students. Joubert's finding further shows that statistically there is an association that reveals the univariate and multivariate analyses on a $p<0.05$ level of significance. Those indeed prove that gender has a significant relationship in the performance of first-year Accounting students. Smith (2004:167) and Joubert (2010:163) both agree that female students perform better because they are more diligent, focused, mature, and responsible and also have more resistance when it comes to academic pressure.

Many studies have investigated the impact of gender on academic performance (Barnes *et al.,* 2009; Wally-Dima & Mbekomize, 2013) with conflicting results. In contrast to the idea that female students perform better than male students in the analysis of Accounting results, Duff (2004), as well as Paver and Gammie (2005) argue that gender is not a considerable factor regarding academic performance in Accounting. In support, Byrne, *et al*., also (2009:160) point out that gender does not have any impact on first-year Accounting academic performance. This also seems to be applicable within the South African context as a study conducted by Barnes *et al.* (2009:51) found no positive relationship between gender and academic performance in first year Accounting.

The above researchers have given contradictory arguments with regard to the relationship between gender and Accounting academic performance. One could therefore deduce that no clear evidence exists that gender has a significant effect on Accounting performance.

3.3.3 Ethnicity and Accounting performance

According to Van der Merwe (2013:111), South African universities still show a huge gap between throughput rate of black students and their white counterparts even after the country's dawn of democracy. This might have been influenced by past education policies, which although changed after democracy, still influence primary and secondary education in South Africa. It also implies that academic achievement and education status still show signs of disparity and a gap between the previously advantaged and disadvantaged sections of the South African population. Although ethnicity is a very sensitive issue, it has to be discussed as it sometimes provides an indication as to why some students are not performing academically in comparison to others.

Scott, Yeld and Hendry (2007:43) are of the opinion that even after democracy in South Africa, many black students still struggle to match their white counterparts in academic performance and pass rates due to positions of extreme inequality in schooling, financially, and academic preparedness. This statement is confirmed by results that indicate that white students portray more competencies in Accounting than

their black counterparts in the first year of university studies (Barnes, 2006:29). A study conducted by Jimenez-Camargo (2011:9) affirmed that white students are still performing better than black students, despite both groups being exposed to similar environments and having access to the same resources. Furthermore, Jimenez-Camargo provides evidence that white families are 4.5 times better placed than black families on average in terms of supporting their children academically.

The above-mentioned argument is further enhanced by Dustmann, Machin and Schonberg (2010:272) who indicate that in Great Britain, students from ethnic groups instantly lag behind white British students; singling language as the most important factor why ethnic groups' students performed just as poorly. In this case therefore, one may come to the conclusion that this scenario is not existent only in South Africa, but is a general and global trend problem. It is for these reasons that Kupczynski and Brown (2014:2) are of the opinion that culture and ethnicity are significant elements of socio-economic identity as well as academic discourse. Therefore, this ethnicity issue causes concern to for lecturers across the globe

3.3.4 The influence of culture, race and language on Accounting performance: Perspectives on black students.

Some black students have the pressure of social responsibilities (Firfirey & Carolissen, 2010:987; Steenkamp, 2012:1) where they are expected to work and study. Therefore, financial pressure obliges some students to earn a living and study at the same time (CHE, 2011:6). The perceptions could be that black first-year students find themselves looking for part-time employment due to financial constraints within the family. Social responsibilities, work pressure and studies at the university affect the academic focus of black students.

Individual student learning and success are influenced by their cultural experiences (Van der Merwe, 2013:114). It is easy for students to relate to the subject if it is related to their culture. It is important for a lecturer to understand students' cultures, their background and their level of knowledge with regard to a respective subject in order to make learning and teaching more productive. In a situation where cultures or the background of other groups are neglected, those students may not perform

academically as they were supposed to. The university can assist in improving students' academic needs, such as improvement in linking learning to culture, understanding the race issue at university and improving the language level of first-year students. Issues of race need to be addressed with caution because it becomes a thorny problem if it is not understood in its global context.

The next subsection of this study focuses on the impact of socio-economic aspects impacting on students' academic performance.

3.4 SOCIO-ECONOMIC STATUS

Socio-economic status (SES) refers to the economic and social position of an individual in relation to the level of education, occupation, financial position, wealth and place of residence (Koban-Koç, 2016:100). Therefore, students' background needs to be considered during their first year of study at the university so that they can be assisted with the necessary educational support during the early part of their studies.

Socio-economic status is mostly used as a means of predicting behaviour of individuals based on their social prestige, power, economic well-being with regards to family background (Conger, Conger & Martin, 2010:3). For example, if parents are not educated, their children might not have as much support as other children would get from their educated parents when they experience difficulty in any of their courses (Tomul & Polat, 2013:450). The economic situation of many students' families become potential determinants contributing to poor performance academically (Fakude, 2012: 49).

It is therefore noted that high failure and dropout rate, as well as slow progression of students at universities are mostly experienced by students who are from humble backgrounds (Macgregor, 2007:1; Bokana & Tewari, 2014:260). However, parents can still motivate their children with regard to other social factors such as instilling responsibility, positive attitude and supporting them in their educational affairs. Some factors which are classified under the socio-economic status of students are discussed next.

3.4.1 Home quality environment

Home is a primary social system, which establishes the ways for lifelong learning (Kamaruddin, Zainal & Aminuddin, 2009:171), for every child across all cultures. Home consists of family members who live permanently within the household. The success of individuals in the family depends on the support received from other members of the family (Asikhia, 2010:238). The implication would be that students depend on knowledge and experiences of the other family members. Parents also have control or authority within a family that is associated with positive academic achievement of a student (Jeyness, 2014:13). In this way, parental intervention in their children's education from home plays a major role.

The home environment plays a crucial role in motivating and encouraging students to perform well academically (Cunningham & MacDonald, 2012:1). However, the home environment that is overcrowded and has few resources to invest in education thus limits the academic achievement of students (Brennan, 2011:3). Consequently, those students from overcrowded or a homeless environment lack tools to do well at school and university (Dworsky, 2008:6). Students from an overcrowded environment are sometimes distracted by noise which interferes with completion of their assignments. Nnamani, Dikko and Kinda (2014:87) reiterate that home quality environment can be a determinant factor that depresses a student based on its physical structure. For example, in a household of 8-10 people, time and place to study might not be available. Lack of some resources might force students to reduce their study hours and force them to work during the day. Therefore, the argument holds that home environment may have an impact on the academic performance of students.

Parents' understanding and valuing of education within the household becomes a challenge as they may not be able support students with study facilities. The perception could be that the family's poor social, economic and financial outlook can cause stress and constraints on students' abilities to cope with the academic load (Joubert, 2010:55). As a result, students do not always receive the support they would need for academic success. Additionally, failure to perform academically can also lead to emotional disturbance in a student's life and thus impact negatively on academic performance (Alshammari, Saguban, Pasay-an, Altheban & Al-Shammari, 2017:61).

Financial constraints of students have been a key negating factor, especially at institutions of higher learning. This key constraint is briefly outlined below.

3.4.2 Financial constraints and academic performance

The enrolment of first-year students at universities in South Africa remains a challenge. The excessive amounts required by universities makes it difficult for students from lower socio-economic backgrounds to sustain payments and influences also the ability to acquire the necessary resources, such as textbooks (Macgregor, 2007:1; Nnamani *et al.,* 2014:88). Therefore, the necessities required for studying at university put a great strain on students from a lower socio-economic background and this serves as a barrier for successful performance (Joubert, 2010:174).

It could be argued therefore that the majority of South African Black students could be negatively affected by their social and economic status. This situation in turn could be a key factor in their poor Accounting results. The reality is that if a student does not have the necessary funding to buy necessities such as food and textbooks, or pay regular transport fare, they may lag behind academically (Nnamani *et al*., 2014:88). Even though not all students from disadvantaged backgrounds are low achievers, their socio-economic status does have a powerful influence on academic achievement as the little funding they obtain does not necessarily meet their educational needs (Joubert, 2010:56).

Transport is considered a contributing factor to academic performance of students as the bulk of students do not get access to residences on campus and have to travel between their campus of study and homestead.

3.4.3 Transport

Logistical factor such as transport plays a role in students failing academically and eventually dropping out. Nnamani, *et al.,* (2014:87) state that missing lectures due to insufficient funds for transport fares is a real factor relating to academic performance of poor students. Students may be absent from school due to insufficient transport fares for those who are living far from the campus (Schoeman, 2015:170)

The study conducted at the University of Stellenbosch by Steenkamp, *et al*., (2009:127) indicates that first year Accounting students mentioned that transport is a factor impeding their academic success. Students miss lectures due to insufficient money for transport. These results indicated that students who on average attended more classes had a significantly greater chance of success in the module in comparison to students who did not on average attend many classes. Additionally, missing classes has a negative impact on effective learning (Chen & Lin, 2008:214). That is to say, the more lectures the students attend the higher the marks they will obtain and the less lectures they attend, the less chance they will have of obtaining good marks. However, class attendance is not just about attending and being physically present, there should be time commitment and participation as well (Teixeira, 2014: 3).

The argument holds that absenteeism would be influenced by potential factors such as not having transport fare, having nothing to eat, being sick and so forth (Schmulian & Coetzee, 2011:2). Another implication regarding transport is that students who cannot afford transport to and from university may sometimes be in a situation where they will be absent when a test is written or when an assignment is to be submitted, with subsequent negative academic results (Joubert, 2010:58). Being absent from lectures is especially undesirable in a subject such as Accounting, where previous knowledge is often used to build new knowledge.

3.4.4 Students' accommodation

A survey done at nine South African universities in 2015 indicates that there were only 68 419 spaces for the 140 000 residence applications (Hook, 2015). A study by Owolabi (2015) regarding the effects of student accommodation on academic performance, found that off-campus housing (which is the case for most students) negatively affects their academic performance. Gwacela (2013:67-68) mentions certain negative aspects relating to off-campus student accommodation, indicating that such students spend more time travelling to and from the university daily. With regards to the challenges related to the living condition arrangements, many students living at home state that their families do not understand the demands that university

education places on them as students. Regarding space availability in off-campus accommodation, most lack study space due to the number of people sharing with the student. This also leads to disruptions when concentration is needed to complete assignments and study for tests and examinations.

Lack of adequate and affordable student housing forces students to rent sub-standard accommodation off-campus (DHET, 2013). Gwacela (2014:68) further indicates that accessing resources such as libraries and computer facilities after hours was not a viable option due to safety aspects. These aspects all contribute to the negative impact accommodation may have on academic performance. In support, the Department of Higher Education and Training (DHET, 2013) and Brits, Hendrich, Van der Walt and Naidu (2011) suggest that first-year students preferably need to stay in campus residences where they will be close to learning resources, especially after hours, for improved academic performance. Lack of proper accommodation denies students the opportunity of pedagogic experiences; thus less opportunity and access to vital facilities may hinder academic performance (Martin & Allen, 2009:42).

Students are also affected by personal factors that may hinder academic performance and which ought to be taken into consideration.

3.5 PERSONAL FACTORS

Personal factors that need to be taken into consideration include academic self-esteem, self-efficacy, and motivation.

3.5.1 Academic self-esteem

Self-esteem refers to all the personal resources such as attitude and beliefs that an individual brings with him/her when facing life challenges and the internal belief system of one's self (Fakude, 2012:13). Furthermore, the American Psychological Association (2012:15) opines that the level on which an individual judges his or her potential capabilities of achieving derives from an emotion about success or failure. It is from this psychological mind-set that researchers suggest that individuals with high self-esteem consider themselves to have the ability to complete specific tasks satisfactorily

and also instil effective coping strategies in managing resources well in completing those tasks (Petersen, Louw & Dumont, 2009:110).

It is therefore proper to suggest that people with high self-esteem normally have high aspirations and are willing to persist above all challenges, while the ones with low self-esteem are easily discouraged. According to Baumeister, Campbell, Krueger and Vohs (2003:10), there is a likelihood that students with high academic self-esteem may have the confidence to cope with challenging problems and derive satisfaction from progress. Similarly, Joubert (2010:64) suggests that individuals with a high level of self-esteem are always prepared to continue with their studies irrespective of their socio-economic status or any factors they encounter that may discourage them. On the other hand, this could suggest that those with low self-esteem are easily discouraged by their personal situations.

Students who exhibit high self-esteem, value and belief in their own academic competences, show a likelihood of becoming high performers and obtaining high marks (Colguhoun & Bourne, 2012:52). Once the level of self-esteem increases, so do the performance scores; if self-esteem declines, the academic performance also declines. The decline of self-esteem does not only lead to poor performance, but also social isolation, social interaction problems with other students, problems of self-expression and shyness in academic activities. Individual academic successes are influenced by how one behaves on an individual level of interaction with the immediate environment (Petersen, *et al.*, 2009:102). An unwelcoming atmosphere, negative expectations from lecturers and unrewarding teaching and learning experiences within the university can affect the students' self-esteem (Hans, 2014:25).

3.5.2 Self-efficacy

Self-efficacy refers to students' beliefs in their ability to master new skills and tasks, often in a specific academic domain (Meral, Colak & Zereyak, 2012:1143). In other words, perceived self-efficacy is concerned with people's beliefs in their capabilities to produce given achievements (Bandura, 2006:312). Self-efficacy is explained in the theoretical framework of social cognitive theory by Bandura (1986:176) which stated that human achievement depends on interactions between one's behaviours, personal

factors and environmental conditions. Students will therefore feel more self-assured in attempting tasks and activities which they believe they have the capacity to comprehend and expect to achieve. In contrast, students with low self-efficacy tend to lack the confidence and courage to attempt tasks that they do not feel capable of. Self-efficacy therefore relates to individuals who believe in themselves and their capability. Self-efficacy also has an effect on the key behavioural indices of academic motivation and achievement, namely: quality of choices students makes, their level of sustaining the effort they put into completing tasks, as well as the persistence they display even when confronted with difficulties (Woolfolk, 2010:371). Students who have self-efficacy are found to make good choices, use greater effort, persevere longer even when coming across difficulties and attain a higher level of success compared to students with low self-efficacy, are characterised by self-doubt, anxiety, lack of effort, behaviour avoidance, failure and learned helplessness (Schunk, *et al*., 2008:139).

Students with high self-efficacy will set stimulating goals for themselves and control their energies to structure their learning environment and make it conducive to learning. They will plan and organise all applicable actions to ensure the achievement of goals and overcome numerous obstacles (Buns, 2010:17). On the other hand, students who are less effective will find it very difficult to control their learning actions and are less motivated to seek help. Accordingly, Jimenez-Camargo (2011:2) states that there is a definite positive relationship between the variables of academic motivation and self-efficacy and that this relationship determines the achievement of students' future goals. This statement therefore would imply that the relationship that exists between self-efficacy and motivation to academic achievement is a determining factor in the final performance of students.

3.5.3 Motivation

Schunk, *et al.,* (2008:4) define motivation as the process whereby goal-directed activity is stimulated and sustained. This definition implies that motivation contains individual goals that provide purpose towards directed action and harnessing of personal drive (Berg, 2015:2). Motivational features encourage students' interest and ability to work harder to attain good results. The encouragement impacts positively on their education endeavours (Byrne & Flood, 2005:115), especially in higher education.

Therefore, motivated students in most cases will attain higher academic performance and achieve expected results. Lecturers have long acknowledged that students' beliefs about their academic capabilities play an indispensable role in their motivation to achieve (Zimmerman, 2000:82). This would indicate that a student's academic self-concept could regulate the student's motivation. Rodriguez (2009:534) agrees when he asserts that academic self-efficacy regulates learning and determines students' motivational orientation. This indicates the existence of a relationship between academic self-efficacy and motivation. Areepattamannil and Freeman (2008:704) confirm this when stating that research on academic self-efficacy is considered an important component of research on academic motivation.

Students' interest and ability to master the subject becomes an engine that influences what, when and how to learn to achieve their goals (Schunk, *et al*., 2014:39). In the same manner, the what, when and how of it could also relate to the extent to which a student is motivated in dealing with his/her own studies. Therefore, the argument stands that motivation plays a major role in determining students' persistence, commitment, engagement, quality of work produced, and the level of achievement attained (Bekele, 2010:116). Steinmayr and Spinath (2007:27) state that the reason why motivation and competence beliefs are found to be highly interrelated may lie in the fact that certain experiences, such as receiving unfavourable feedback, often influence both competence beliefs and motivation at the same time. High-achieving students display more confident academic self-perceptions and motivation than low-achieving students. High achievers and low achievers differ in both their motivational patterns and their academic self-perceptions. Where high achievers are usually those who describe themselves as being "good" students, low achieving students describe many situations where they felt powerless in motivating themselves to control their academic behaviour (Brophy, 2010:134).

Students perceive lack of motivation as a factor hindering their success in first-year Accounting (Steenkamp, *et al.*, 2009:127). This statement implies that once students are not academically motivated, they may not actively engage in their learning. Desmyter and De Raedt (2012:19) posit that students' negative perception about Accounting as a subject might lead to poor performance, as such a perception may result in lack of motivation with the result that nothing encourages them to work harder

at their studies. According to Byrne and Flood (2005:115), there are many factors which motivate students to succeed in higher education with regard to their career and educational aspirations. It is in this way that a combination of intrinsic, extrinsic and goal-oriented motivation drives the majority of students to attain academic excellence, especially in their first year at university. The implications of the above statement are that if a student does not possess the intrinsic, extrinsic and goal-oriented motivation and drive towards what he or she is studying, this condition poses a challenge that might lead to a student not performing well, as there is nothing much to motivate him or her to work hard.

3.5.4 Time management and time perspective

Time is a limited resource for all students at university due to high academic pressures and students need to prioritise time in order to succeed academically (Balduf, 2009:274). Denlinger (2012:407) states that, self-perception of having good time-management skills proved to have a direct correlation to performance levels. Hamzah, Lucky and Joarder (2014:347) agree and indicate that there is a significant and positive relationship between time management and students' academic performance. According to Indreica, Cazan and Truţa (2011:1097), managing time becomes very important for every student with regard to their working pace and organising of their learning activities. Therefore, the manner in which students at first-year level of study regard time as a major resource, will have an influence on their academic success.

Chipunza and Masiza (2004:82) argue that every individual has the ability to manage time as long as the person has clear goals. On a positive note students are much more motivated if they can manage their time to solve the task. Therefore, time management is a major resource in learning and the way students perceive and reflect on the importance of time will reflect on academic performance (Taraban, & Logue, 2012: 500).

Most students find it difficult to use their time effectively. They have a considerable workload each semester and it is, therefore, important that they learn how to use their available time wisely. Poor management of time is often caused by lack of planning. In most cases, students cannot balance their time between study and leisure.

Sikhwari, Maphosa, Masehela and Ndebele (2015:444) suggest that a time schedule sheet should be used to ensure good and effective management of one's study time. Students' lack of time management skills leads to postponement of tasks and subsequently poor academic performance. If time is not planned effectively, students may not be able to study the work for test or examination purposes (Joubert, 2010:69). The implication is that time-on-task could be an important indicator of academic growth, development and success. Time students spend on engaging with their subject content may lead to improved results (practice makes perfect). In Accounting, multiple exercises on a certain aspect of Accounting can be practiced. In this way, time is spent fruitfully as a variety of transactions could be covered.

Good and effective time planning facilitates students' time management and may lead to a more motivated student. This may also increase the responsibility of the student and promotes learning. In addition, a well-planned Accounting lecture might enable students to link their previous experiences with the new knowledge. Students are given time to engage the lecturer and work amongst themselves. The platform of sharing ideas through social interaction during class discussion on Accounting concepts may add value to students' academic performance. This would also encourage students to attend classes as they will be taking part in their own learning. This statement would imply that collaboration among students themselves, knowledgeable peers and lecturers will in the long run improve academic results.

The next sub-topic deals with the effects of and/or relationship between lecture attendance and academic performance. This scenario is briefly visited in the next section.

3.5.5 Effects of class attendance on students' performance

The matter of poor class attendance rate at universities has been and is still a main concern for educational researchers all over the world. Absenteeism is common across university classes with some of the reasons mentioned in the literature as illness, tiredness, prioritizing other academic work, expectation of low academic gain, lack of interest/motivation or boredom (Mohanan, Harichandran & Vijayan, 2017:1056). Barnes (2006:89) found a positive relationship between lecture

attendance and academic performance in first-year Accounting students. Steenkamp, *et al*., (2009:131) support this in their finding that students with a better record of lecture attendance performed significantly better compared to students who demonstrated poor lecture attendance.

Students who miss lectures lose the advantage of the auditory and visual supplementation of the textbook; the chance to acquire information from questions asked by other students during lectures and the subsequent explanation provided by the lecturer; the direction provided in the critical thought process through the line of questioning followed by a lecturer; and the skill to create class notes as a supplementary source of information (Schmulian & Coetzee, 2011:178).

The findings on the effect of class attendance on academic performance of Accounting students at a South African university found a significant positive correlation between class attendance and academic performance by Schmulian and Coetzee (2011:190), however, the correlation was low and not very meaningful. These findings suggest that the large class setting, its situation in South Africa's cultural and economic environment, or a combination of the two, may decrease the effect of class attendance on academic performance.

A recent study done in India by Mohanan, *et al*., (2017) revealed that class attendance has a significant positive correlation with examination scores. It also established a significant effect of the attendance of students on their performance in Organic Chemistry examination. These findings corroborate the reports of Steenkamp, *et al*., (2009) that class attendance correlates strongly with academic performance.

3.5.6 Effective management of homework

Literature indicates that doing homework frequently is positively related with students' academic achievement. Hence, as anticipated, the quantity of homework done is one of the variables that indicates a strong and positive association with academic success (Valle, Regueiro, Núñez, Rodríguez, Piñeiro & Rosário, 2016). There seems to be consensus in the literature that completing homework is always advantageous to students. However, it is also true that the fundamental aspect for academic success

does not rely on the quantity of homework done, but rather on how students engage with homework (Trautwein, Schnyder, Niggli, Neumann & Lüdtke, 2009:78), and on how homework engagement is connected to student motivation. There is, therefore, a call to analyse the process of homework rather than just the product; that is, to examine the degree to which the quality of the process of doing homework may be appropriate to the final outcome.

Literature has consistently shown that a deep approach to learning is related positively with the quality of the learning outcomes. The embracing of a deep approach to homework is contingent on many factors, but students' self-set goals and the motivation for doing homework is among the most critical motivational variables (Vallejo, Tuero, Núñez & Rosário, 2014:50). Importantly, the amount of homework done is associated not only with the time spent, but also with time management. Time spent on homework should not be considered an outright indicator of the quantity of homework done, because students' cognitive skills, motivation, and prior knowledge may considerably affect the time needed to complete the homework assignment. For students, managing homework time is a task in itself, but doing it properly may have a positive effect on their homework completion, and on academic achievement (Xu, 2010:36).

3.5.7 Effects of positive attitude towards Accounting as a subject

Attitude is an essential part of human identity. Every day, people love, hate, like, dislike, favour, oppose, agree, disagree and influence. All these are evaluative replies to an object. Hence, attitude can be defined as a summary assessment of an object of thought. Attitude is preferences and predispositions that guide an individual's conduct and influence to an action that can be evaluated as either positive or negative (Mohamed & Waheed, 2011:278).

According to Fakeye (2010:206), a positive personal attitude can predict success while on the other hand a negative personal attitude can predict poor performance in any subject. Furthermore, it is shown that students who have a positive attitude in science pass the subject and other related subjects. In so doing, one would suggest that success therefore depends on how one perceives the subject. For example, Bertea

(2009:3) argues that the attitude might be positive if the type of education fits the students' needs and characteristics, or negative if the students cannot adjust to the system because they do not possess the essential characteristics for the subject.

The implication is that students will perceive what they are taught positively if they appreciate their improved knowledge. Naidoo (2012:15) indicates that the negative perceptions towards Accounting as a subject are also likely to affect students' attitude towards learning and subsequently further influence poor performance. Additionally, Fakude (2012:37) argues that not only the subject and the attitude, but also lecturers play an instrumental role in students' academic performance. This implies that lecturers' key role and duty as professionals are to persuade students to perceive Accounting in a positive light.

Researchers such as Evans (2007) and Mohamed and Waheed (2011) discovered significant correlation between students' attitude and academic achievement. The general perception in university circles is that students have a negative attitude towards Accounting as a subject. In most of these arguments, it is debated that students are not engaging with the subject with the required effort. In this vein, Fakude (2012:55) found that students have negative attitudes towards the subject if lecturers put high demands on academic performance, but they (the lecturers) provide nothing in addition to normal lecturing and sometimes even refer to students as stupid. Not only are personal factors important for academic success, but also factors within the institution.

3.6 INSTITUTIONAL FACTORS

The factors discussed in this section comprise class size and institutional support programmes.

3.6.1 Class size

A university degree is a requirement for a growing number of occupations in most societies. It is reasonable to say that academic certification is essential for most positions of privilege, authority, and prestige in modern societies. This tends to place

immense power in the hands of universities, hence the jostle for enrolment. In light of rapidly increasing enrolment in many universities, administrators are under fire regarding the issue of growing class size and the potential weakening of academic standards (Bakasa, 2011:19).

According to Ehrenberg, Brewer, Gamoran and Willms (2001:2), class size refers to actual number of students taught by a lecturer at a particular time. Additionally, class size is considered to be one of the key aspects of quality of education. In a situation where a class is large the principle of how students learn and construct knowledge may not be effectively implemented. Effectiveness and accommodating students to ask questions in order to construct their own knowledge would be limited by the number of students in a classroom. The support of the lecturer to an individual and scaffolding process can easily take its course in a smaller sized lecture room and it is with this type of interaction where students are provided with opportunities to ask questions and receive answers (Browning & Heinesen, 2007:415). Browning and Heinesen's studies on variation in subject-specific classes in Denmark indicates that large classes provide low quality teaching and display low social relationships among students and lecturers, with the limiting effect of proper interaction in the lecture room.

According to Falch, Strøm and Sandsør (2015:4), small class size is ideal and is also considered to reduce crowding and disruption. In such classes, students' attention is increased and time and space increases for the lecturer to attend to students' individual needs. Lecturers and students prefer small classes, as they experience more interaction amongst each other and they believe that more learning takes place within a smaller class (Joubert, 2010:78). Small class size is considered to have a potential of facilitating learning more effectively than the larger class (OECD, 2011:392).

Kokkelenberg, Dillon and Christy (2006) indicate that, in studies they examined, class size has no or little influence on student achievement. This however has not supressed the debate. In agreement, Bakasa (2011:3) is of the opinion that class size does not have a significant influence on students' academic performance for any size of the class. However, lecturer preparedness and motivation can be considered playing a major role in any class size to assist students to perform well academically. Class size,

therefore does not show any sufficient empirical literature evidence as a factor related to students' failure rate at the first year of study.

Different viewpoints are provided by researchers in the preceding discussion. What is important in the context of Accounting is that Benton and Pallett (2013) indicate that while class size may not be significant in courses best suited for lecture-style learning, courses geared toward promoting critical thinking and advanced problem solving are best taught in a smaller classroom environment. The additional costs of smaller class groupings at universities has been viewed to be too expensive. Nonetheless the self-reported learning benefits and positive attitudes toward smaller classes should not be ignored.

Lecturers have the ability to detect when a student is struggling and should provide such a student with support options to foster improvement.

3.6.2 Support programmes

Providing students with access to university opportunities is a necessary but not sufficient condition to increase educational attainment levels. It is essential that universities create and implement student development programmes to address high attrition rates, thereby increasing retention and student success. Universities have strategic goals to increase student enrolments, but often fail to address the needs of students to be more persistent once they have matriculated and arrived on campus (Hossler & Anderson, 2005:67).

In recent times, most universities have put in place intervention programmes for at-risk students who are academically challenged. The aim is to improve their academic performance (Rural Education Access Programme, 2010:12). Intervention programmes such as orientation, bridging, mentorship programme, supplemental instruction and e-learning technologies are examples of supporting programmes introduced by universities

These interventions address many aspects of the social constructivism as applied in this study. The support programmes appeal to interaction techniques where

professional staff and more senior students assist at-risk students, as well as technology devices that both students and lecturers can put in place to address the bridging gap as it practically exists. It is believed that introducing these intervention approaches would advance students' study skills and improve their academic success.

3.6.2.1 Orientation

Students' university readiness, preparation for classes, commitment, expectations, adjustment, motivation, self-concept, perception in Accounting and personal attitude do not only affect how students approach learning activities, but also affect their progression to the wider higher education environment (Byrne & Flood, 2007:46). Therefore, the argument holds that academic performance of students depends on personal preparedness to handle the traumatic transition from their respective schools to the university. Consequently, the transition on its own, exposes first-year students to a risk in terms of academic failure due to unfamiliarity and uncertainty of the environment (Naidoo, 2012:12). Therefore, risk could be higher in the case of inappropriate orientation, as students would take long before being familiar with where classes are and which lecturer will be lecturing them.

In order to overcome the challenges that are faced by first-year students, most universities intervene by introducing proper orientation programmes (Prebble, Hargraves, Leach, Naidoo, Suddaby & Zepke, 2004:1). Therefore, these intervention orientation programmes are sometimes scheduled for a week before universities reopen at the beginning of the academic year. During the orientation students will be shown all institutional facilities and educational resources, so that they would be able to attend from the first day that lectures commence (Indreica *et al.,* 2011:1097).
It is widely understood and acknowledged by researchers and practitioners that student engagement is a critically significant component that can lead to improved academic success (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008:540). Student engagement begins at the point of recruitment and should continue throughout a student's academic studies. Universities that create a more inclusive and appealing campus atmosphere report that students become more involved and active in the learning process. Institutional and student development activities that facilitate student

inclusion and actively engage students can increase academic achievement (Hossler & Anderson 2005:68).

3.6.2.2 Bridging programmes

Bridging courses are short intensive programmes designed for pre-tertiary students entering higher education (Poladian & Nicholas, 2013:5). It is a programme meant specifically for prospective students who do not directly qualify for, or meet university entrance level requirements (MacGillivray, 2009:455). In essence, bridging courses are only offered at an introductory level and may assist in narrowing the gap between high school and university studies. Subjects taught in bridging courses are a few subjects normally derived from the courses done at the first-year stream of the programme of the university (Thalluri, 2016:37). Bridging courses assist under-prepared students to successfully enter higher education.

Therefore, one would suggest that bridging courses aim at bridging the gap between high school knowledge of Accounting and higher education expectations and standards of Accounting. Bridging courses can thus familiarise students without Accounting terminologies and recordings and some interpretations which might lead to better academic achievement. Bridging could be considered as a foundation of Accounting, a building block to the main content as they register for their degree or diploma. It is therefore perceived that bridging programmes, regardless of subject or qualification, have shown to add value to improving students' academic performance and retention (Essack & Quayle, 2007:79). It is reasonable therefore to accept and recommend the inclusion of bridging courses as part of the intervention strategies and to introduce a mentoring programme to address the failure rate in Accounting.

3.6.2.3 Mentoring programmes

Mentoring programme refers to a relationship between two individuals of similar age, but one being senior and more experienced based on time, life experience and university study (Terrion & Leonard, 2007:150). Both mentor and mentee come together, either informally or through formal mentoring schemes, in the pursuit of fulfilling a combination of functions (Bozeman & Feeney, 2007:721). The formed mentoring relationship enables an increase in cognitive, affective and skill-based learning outcomes (Lee, Krauss, Saudi & Hamzah, 2016:419), as there is a transferring of knowledge and experiences by the mentor to mentee.

Cognitive knowledge that the mentor instils in the mentee comprises of effectively increasing interest and preparedness for the first year subjects and helping them to make informed decisions about time management and self-organisational abilities towards academic activities and university adjustment (Paglis, Green & Bauer, 2006:460). The seniors are transferring and sharing experiences with the first years.

Hamlet (2015:301) refers to a peer mentor as a way another student can serve as a resource, a helping hand, a sounding board, and a referral service to first-year students. On the same note, the job of peer mentors is to provide support, encouragement, and information to students in their department who are just beginning the graduate programme (Hamlet, 2015:302). Peer mentorship enhances learning and personal development and supports first-year students academically and socially. Therefore, peer mentoring is supported by theorists, for example the zone of proximal development of Vygotsky as discussed in chapter 2 of this study. This theory suggests that students' guidance on the cognitive level of learning with the assistance of capable peers can serve as a resource for a first-year student. As a result, the social integration of students into learning is considered to be a potential ingredient for students' academic achievement (Jackling & Mcdowall, 2008:449).

Mentors interact with the target group (mentees) of students, sharing knowledge and experiences (Snowden & Hardy, 2012:76). The University of Dundee in the United Kingdom appointed third-year Accounting students as volunteers to assist first-year students within the mentorship programme to address the issues of writing skills, study

techniques and examination preparations (Fox, Stevenson, Connelly, Duff & Dunlop, 2010:156). The potentially failing students were identified by the mark they had achieved as their course mark. In order to address those vulnerable students in Accounting, the department of Accounting and the university introduced a mentoring programme.

The university's motive for introducing the mentorship programme was mainly to improve first year academic performance. Fox *et al*. (2010:150) measured the effectiveness of university intervention (peer mentoring), by comparing pre- and post-mentoring examinations of the first-year Accounting students (mentees). The findings of the study indicated that the peer mentoring scheme has shown a positive effect on first year Accounting performance. The same positive results were also found at two different universities in Australia (RMIT University & Deakin University) (Jackling & MCDowall, 2008:455). From these universities mentors gave an assurance that through their mentorship process they have contributed to students learning and understanding of Accounting concepts. Confidence was developed through generic skills such as discussions, debate and presentations for undergraduate Accounting students. The mentees in this study confirmed to have acquired much from the mentorship programme in terms of practical information on motivation, study skills and time management.

However, the differences and uniqueness of students' learning styles (cf. 2.2.3) may encourage considering other interventions. Mentorship programmes may work for some students but not for others, because students perceive things differently. The same argument encourages universities not to focus on one intervention, but rather incorporate more interventions to address the learning differences of students – such as supplemental instructional (SI) programmes. SI focuses more on assisting students in difficult courses. The SI leader concentrates on the course content of the specific course. While in mentoring programmes new students are matched with peer mentors whom they will meet face-to-face over a period of time. Therefore, mentoring provides more individual guidance that embraces academic progress and overall transition of new students to the university.

3.6.2.4 Supplemental Instructional programmes

Supplemental Instruction (SI) is an academic intervention programme that encourages a peer-led academic support programme that aims to assist in high-risk and difficult courses and is offered to all students enrolled in the supported classes (Vorozhbit, 2012:6). The programme, like other intervention strategies, aims to improve students' academic performance and retention (Kilpatrick, Savage & Wilburn, 2011:33). In this case, Accounting would form part of those subjects classified as high-risk due to the high failure rate at the first year of university study. The SI sessions are held three or four times a week depending on the institutional arrangements with regards to time slots for SI sessions. The sessions are informal but well organised by the affected faculties to ensure that students who volunteered to attend sessions are comparing notes, discuss readings and concepts, clarify issues of confusion, and solve complex problems through the guidance of their SI leader (Holman Success Center, 2014:2).

The SI leader also attends each class session with students to stay up to date in the course and also to develop an understanding of the lecturer's lecturing style (The University of Missouri-Kansas City, 2014:14). Through the process of the SI sessions the SI leader should work closely with the lecturer in order to review session plans and discuss issues that students are experiencing during the formal lecturing. SI sessions create deeper engagement with – and enhanced learning of the material that was covered in classes (Stone & Jacobs, 2008:1).

According to the University of Missouri-Kansas City, as cited in Stones and Jacobs (2008:1), students who normally participate in SI sessions improve their critical thinking through debate amongst themselves and their SI leaders as well as their reasoning skills. The students who attend supplementary instruction regularly appear to obtain new study strategies to increase their understanding of the subject, besides improving on general skills such as teamwork, communicating on a subject, and making presentations in front of others (Malm, Bryngfors & Mörner, 2012:10). SI sessions include information on note taking, anticipating test questions, vocabulary development, memory aids, and reasoning skills that characterise intellectual maturity (Harding, Engelbrecht & Verwey, 2011:849). Coupled together, these approaches can build and prepare first-year Accounting students for their academic success.

Supplemental Instructional programmes (SI) were first introduced by Deanna Martin, at the University of Missouri at Kansas City (UMKC) in the 1970s. The university was faced with major changes in demographics of students and an unexpected rise in student attrition rate. Supplementary instruction came as an intervention to increase student success in high risk courses (Malm *et al*. 2012:88; Vorozhbit, 2012:49). Supplemental instruction since its inception has spread widely and is used by more than 1 500 institutions of higher learning and in nearly 30 countries worldwide, South Africa included (Naidoo & Paideya, 2015:2).

According to Esterhuizen, De Beer and Baird (2008:29), the supplemental instructional programmes are not remedial, instead guide students with strategies of how to learn and what to learn. Therefore, first-year students are given an opportunity to learn skills such as problem solving, reasoning, decision making, evaluating concepts and models (Naidoo & Paideya, 2015:2). The implication is that students are also informed about how to get assistance and ask questions from peers, work in groups, and learn to present and discuss a given homework task. All the mentioned skills are required for Accounting practices to enable students to understand and perform academically in Accounting. Further implications could be that Accounting demands critical reasoning in almost all the topics to be covered at first-year level.

The main benefits obtained from SI sessions were appreciation of the diversity in students' learning styles, better understanding of course material, improved self-confidence as a learner, improved relations with lecturers, transfer of skills learned to other courses and understanding the value of collaborative learning (Malm *et al*. 2012:2). The SI programme also plays the part of support, because SI leaders are senior students who have experience of the pressures of first-year Accounting, and knowledgeable in assisting others with the methods of learning. The emphasis is that SI is reviewed as a means of improving students' academic performance targeting difficult courses rather than high-risk individual students (Vorozhbit, 2012:8). Below is a discussion of how e-learning could also assist first-year students to improve their academic performance and eliminate many of the barriers that students are faced with regarding education and their performance.

3.6.2.5 E-learning technologies

The impacts of Information and Communication Technologies (ICTs) on the higher education sector have increased the awareness of many staff about the need to improve teaching and learning. This has led to the development of new teaching strategies to accompany new technology (Benson & Samarawickrema, 2007:1). Online learning is one outcome of the rapid improvements in ICT. At its most basic it provides students with better access to traditional teaching materials. But online learning offers much more, it can enhance learning processes and teaching experiences by offering new learning strategies. One of the most significant of these technological improvements is e-learning which has expanded opportunities for when and where learning takes place. The advantages of enhanced communication between students and lecturers are commented upon by Mapuva (2009:7). The educational possibilities of e-learning are an essential complement to the traditional way of teaching (i.e. face-to-face).

Currently the Blackboard platform is one of the most educational systems used globally. The Blackboard Learning System is a virtual learning environment and course management system developed by Blackboard Inc. Its main purposes are to add online elements to courses traditionally delivered face-to-face and to develop completely online courses with few or no face-to-face meetings. It provides users with a platform for communication (announcements, chat, discussions and mail) and sharing content (course content, calendar with due dates, learning modules, assignments and media library) (Heirdsfield, Walker, Tambyah & Beutel, 2011:2). Therefore, for the improvement of first-year Accounting students, EL can be used in conjunction with face-to-face lecturing (blended learning). This will provide students with the opportunity to explore technological devices and to decide whether they want to attend lectures or make use of blackboard where they could access learning from their homes.

3.7 STUDENT ADJUSTMENT AT UNIVERSITY

Adjustment to the university environment is viewed as a vital factor in predicting university outcomes (Petersen *et al*. 2009:103). This implies that getting along well

with peers, engaging in pro-social behaviour and productive classroom activities and associating with other sources who support academic performance will enhance adjustment and relaxation at university (Farmer, Irvin, Thomson, Hutchins & Leung, 2006:2). Consequently, the transition from high school to university imposes a lot of stress due to unexpected circumstances such as adjusting to the new environment (Mudhovozi, 2012:251).

Transition paths or processes are vital for students' adjustment life at university. Transition is stressful for students both with regard to the type of learning required and adjustment to the wide environment (Byrne & Flood, 2005:115). It is for this reason that coping with different levels of workload, assignments, variety of teaching methods and working with other students and lecturers, demands adjustment (Ligadu, Abbas & Han, 2006:1). That adjustment process is typically a multi-dimensional process of interaction between an individual and his or her environment (Fakude, 2012:27). According to Huysamen in Joubert (2010:84), South African first-year students find it even more difficult to adjust, considering those who are from previously disadvantage schools and cultures. It is clear that the above= mentioned students start by adjusting to different cultures and a new environment prevailing at university. Therefore, adjustment is all about an attempt to bring about harmony between the demands and needs of the individual and his or her new environment.

The student's adjustment brings about the relationship between students and learning environment which might influence and improve the quality and affect students learning and ultimately their achievements within higher education (Ligadu *et al*., 2006: 1). However, that adjustment is not a smooth process because entering into higher education presents challenges to first-year students regarding learning, making friends and lecturer interactions (Jones, Coetzee, Bailey & Wickham, 2008:41). Students may experience difficulty in making the transition from the high school environment to a tertiary environment. At high school learning is highly structured whilst at university students have to take personal responsibility for their learning.

For first-year students to adjust fully and become successful in their first year of study, they have to pass through the three stages of adjustment (Joubert, 2010:84). Those stages consist of separation, transition and incorporation. These three stages imply

that students need to re-negotiate existing relationships and solid support systems from parents, family members and friends to adjust into their new environment with its demands (Mudhovozi, 2012:252). Therefore, students who successfully pass through the separation stage are more likely to cope with the stress related to academic issues of the university and as a result they may perform well academically.

Transition from high school to university triggered different coping mechanisms for different students, however proper transition and adjustment are critical for academic success (Byrne & Flood, 2005:115). Poor transition and adjustment mechanisms to university life might correlate with poor academic performance. Consequently, students who fail to adjust constructively with their environment may become overwhelmed and eventually fail to cope with university life (Mudhovozi, 2012:251). The transition to university requires adjustment of habits and expectations of the university which sometimes differs from students' expectations of just sailing through all examinations at the first attempt (Byrne & Flood, 2005:119-121). University exposes students to larger classes, different teaching styles, the high volume of work, more tests and standards are high as compared to their high schools. It is clear that mismatch of expectation and reality would demotivate students to an extent that they may find it difficult during the transition to adjust to the realities and the demands of the university. However, it is imperative for first-year students to respond to the academic and social demands of the university in order for them to be successful (Ngwenya, 2004:1).

The first year at university is a critical stage for students. Failure to meet the transition challenges might impact negatively on academic performance and progression of their studies (Burgess, Crocombe, Kelly & Seet, 2009:5). It is also imperative for the institution to assist, guide and show students the specific departments and faculties to access courses, specific lecturers' offices and other relevant institutional resources (Jones et al., 2008:41-42). This statement confirms the notion that failure to access the above-mentioned facilities retards first-year students' academic success. For the purpose of overcoming the adjustment challenges, the findings of a study conducted by Mudhovozi (2012) indicate that the solution to the struggle to adjust to the university environment could be solved through hard work and determination.

3.8 CONCLUSION

Chapter 3 encapsulated and debated issues related to non-cognitive factors such as biographical characteristics, socioeconomic factors, and personal factors. The student's perceptions with regard to Accounting as a subject, attitude, motivational patterns and the effect thereof, were visited. The chapter concluded with the issues around institutional factors which focused on class size, teaching methods, support programmes and bridging programmes. Their impact of adjustment to university life on the student's learning ability and capability was debated and arguments analysed. The following chapter speaks to the research design and methodology. It deals with the structure of the research project.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter is devoted to the explanation of the theoretical framework, research design and methodological dimensions that are employed in this study. Consequently, the research processes that guide the study are highlighted in this chapter. The research processes include population and sample selections, data collection procedures, approaches applied during data analysis and an overview of ethical considerations.

4.2 THEORETICAL FRAMEWORK

The data generated for this study link to the possible influence of both cognitive and non-cognitive factors on academic performance of students. Qualitative research places emphasis on the importance of exploring how participants in social settings construct their beliefs and express their feelings and also appeals for participants' words and actions to be accurately portrayed (Johnson & Christensen, 2008:265-277). Bitzer (2010:298) states that the theoretical framework relates to a theory or theories that assist to understand research planning and to interpret research results. The theory of constructivism, as explained in Chapter 2, therefore has a direct bearing on this study in terms of cognitive constructivism (cognitive factors) and socio-constructivism (non-cognitive factors). Table 4.1 indicates how constructivism links to qualitative research studies.

Table 4.1: Constructivism and qualitative research

Philosophy	Constructivism
Type of research	Qualitative
Methods	Open-ended questions, emerging approaches, text and/or image data
Research practices	Positions researcher within the context of the study; Collects participant-generated meanings; Focuses on a single concept or phenomenon; Brings personal values into the study; Studies the context or setting of participants; Validates the accuracy of findings; Interprets the data; Creates an agenda for change or reform; and Involves researcher in collaborating with participants.

Source: Andrew, Pederson and McEvoy (2011)

4.3 RESEARCH DESIGN

The design of any study positions it within a specific theoretical paradigm of social research and clarifies the characteristics of the paradigm. It defines a flexible set of guidelines that link the theoretical paradigm to a strategy of enquiry and specifies why it is suitable for the specific study (Denzin & Lincoln, 2008; Creswell, 2014). McMillan and Schumacher (2010:22) indicate that research design gives direction as to how the researcher has to conduct a particular study that includes when, from whom and under which environments data is to be obtained. Thomas (2010:313) concurs that a research design refers to the broad plan of a research project to assist the researcher to decide on how to figure out and conduct the research. As such it is sensitive to the research problem, the research questions and the aim or purpose of the research.

For this study, a phenomenological research design is used. McNeil (2015:25) explains that phenomenology emphasises the subjective experiences that people have, and the interpretations and meanings that these persons give to the world that

surrounds them. Phenomenology is interested in the significance of the behaviour of certain groups of people from the point of view of that group. The goal of qualitative phenomenological research is to describe a “lived experience” of a phenomenon. Ballad and Bawalan (2014:3) are of the opinion that the phenomenological approach enlightens the experience at hand. Phenomenologists attempt to see things from other peoples’ point of view. The essential aim that phenomenology has is to describe phenomena as experienced by individuals, rather than to explain the phenomena, and that these studies usually start from a perspective that is free from any preconceptions. In this study the experiences of the participants are important and are therefore gathered as data. The nature and the philosophical orientation that the researcher is bringing into the study contributes towards the method of collecting data (Creswell, 2014:6). In this study the researcher collected qualitative data (non-numerical data) to seek and interpret what participants shared during interviews and questionnaires.

Despite the difficulty of containing qualitative research within a single definition, it is frequently defined as an interdisciplinary, trans-disciplinary and occasionally counter-disciplinary field of enquiry that commits to a naturalistic viewpoint and the interpretive understanding of human experience that is moulded by ethical and political perspectives (Denzin & Lincoln, 2008). Creswell (1998:15) traces qualitative research within five traditions of enquiry (biography, phenomenology, grounded theory, ethnography and case study) and describes the researcher as someone who builds a complex all-inclusive picture, analyses words, reports detailed opinions of participants, and conducts the study in a natural setting.

Research design further guides the researcher in collecting, analysing and interpreting data on a particular phenomenon (Creswell, 2014:12). Researchers use designs that will result in drawing the most valid, credible conclusion from the research questions. The research questions were formulated based on poor academic performance of first year Accounting students at a University of Technology within the National Higher Certificate in Accounting. A phenomenological qualitative research design enables the participants to provide their views, opinions, beliefs and experiences regarding a specific phenomenon (Terre Blanche, Burrheim & Painter, 2006:287; McMillan & Schumacher, 2010:315).

In this study the researcher endeavours to collect rich descriptive data in respect of a specific phenomenon or context with the purpose of developing an understanding of what is being witnessed or studied. It focuses on how individuals and groups view and understand the world and constructs meaning out of their experiences (Leedy & Ormrod, 2013:134).

4.4 POPULATION AND SAMPLE OF THE STUDY

All research is concerned with identifying the research population which will provide the information necessary for answering the original research question(s).

4.4.1 Population

Babbie (2008:121), Polit and Becker (2012:738) and McMillan (2012:96) state that population is a group of individuals who share the same characteristics, or a totality of individuals regarding which inferences are to be made in a sampling study. For this study the target population are students who have enrolled and are repeating Financial Accounting 1 in the National Higher Certificate in Accountancy at both campuses of a University of Technology in 2016. The second group are lecturers with experience in lecturing the course under study (Financial Accounting 1).

The target population is therefore lecturers and first-year students of Financial Accounting 1 at both campuses of a University of Technology in South Africa.

4.4.2 Sample

A sample is a representative group of the entire population that the researcher focuses on in order to obtain relevant information for the specific study (McMillan & Schumacher, 2010:354). The sampling procedure often used in qualitative studies (as in this study) is non-probability, purposive sampling (Lodico, Spaulding & Voetgtle, 2010:134). The researcher opted for purposive sampling to capture information-rich data from participants who are knowledgeable and possess insight into the problem of the study (Thomas, 2010:313). In purposive sampling the sample is approached having a prior purpose in mind where the criteria of the

elements who are to be included in the study is predefined. Not everyone who is available is included, rather those available and who meet the defined criteria are included (Gentles, Charles, Ploeg & McKibbon, 2015:1776). The sample for this study consisted of five Accounting lecturers of first-year students and 60 first- year Accounting students repeating Financial Accounting 1 from both campuses of a university of technology.

The role of the researcher and participants within the research is discussed next.

4.5 RESEARCHER AND PARTICIPANTS' ROLE

Both researcher and participants are active participants in qualitative research. For the credibility of social research, it is critical for social researchers to clarify their role within the research. The researcher is a lecturer in the Faculty of Management Sciences: Department of Business Management. The researcher is not a lecturer of Financial Accounting, but has a keen interest in the aspects that play a role in the academic success of students enrolled for this module.

In all contact with the participants the researcher remained as objective and as neutral as possible. In order to maintain research credibility, the researcher did not allow prior knowledge of participants to cloud professional integrity. The researcher remained focused on the research objectives and as such interviewed lecturers in their natural setting (their offices in this case) and distributed questionnaires to students in the lecture halls. Participants (both lecturers and students) therefore became co-researchers as they were given the opportunity to air their views regarding the problem under study and to provide possible solutions to the problem. As such, their suggestions were incorporated into the study as part of the recommendations made for this study.

The researcher adhered to ethical issues and received the necessary clearance/ permission letter from the Institutional research committee under the Headship of Dr Balia within the Academic planning section. Later the committee was informed that the data gathering is not going to be on focus group interviews any more but interviews to

lecturers and questionnaire to students. Academic planning committee gave the permission to go ahead with the initial permission as attached (See Annexure B).

The researcher explained the purpose of the study and the integral importance of the participants in the research process. Participants were also made aware that they were not forced to take part they could withdraw at any given period if they did not feel comfortable with the process. However, they were encouraged to take part as they could enhance their own studies and success. Data collection occurred immediately after the January registration during the first quarter of 2016. It was important to gather information from student participants prior to them engaging with the module for a second time. Reasons for their failure at the end of the previous year would still have been fresh in their minds. After all other explanations, assurance was given to participants of their anonymity and confidentiality. The researcher did everything in her power to make sure that the identity of the participants was protected at all times (Kreugar & Neuman, 2006:138-139). Questionnaires were completed anonymously. During the reporting stage of this study, participants are referred to by number.

To guard against bias, the researcher invited a colleague to act as an observer during the distribution, completion and submission of questionnaires. A similar process was followed at the other campus where an independent colleague administered and collected the questionnaires.

4.6 DATA COLLECTION PROCEDURE

This section outlines the preparation stages and the actual data collection procedures taken into consideration during data gathering. Table 4.2 below illustrates the stages followed for data gathering until completion.

Table 4.2: Data collection and analysis procedure

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Planning	Initial to data collection	Elementary to data collection	Concluding data collection	Achievement
Seeking permission to conduct study; Institutionally (Research Office) and departmentally (Dean of the Faculty of Management Science)	Preparing questions for both interviews and questionnaires	Building rapport (fieldwork) data collection, developing codes and constructing themes from interview transcriptions and written responses	Interpretations and verifications of emergent findings	Construction of meaning and arriving at conclusion

Table 4.2 illustrates the different stages that the researcher went through during the gathering and analysis of data. The table summarises the stages from planning till when data has been constructed into meaning and conclusion. During the first stage of data gathering the table clearly states the authorities from whom the researcher seeks permission to conduct studies at those research sites. The second stage was to make preparations for data collection by developing questionnaires and interview questions' structure for the actual data collection processes. In the second stage the supervisor played a major role by making sure that the questions prepared covered the main research question of the study. The third stage consisted of building rapport with the participants before the actual fieldwork. In this stage the principles of ethical issues are clearly shared with the participants to ensure trust with the participants; guard against misconduct and promotion of integrity research (Creswell, 2014:92). Furthermore, in this stage participants were adequately made aware of the type of information that would be expected from them, what they are getting themselves into; the purpose of the study, procedures, benefits, risks and issues of confidentiality

(Kumar, 2009:212). It is during this stage that anonymity was guaranteed to participants. The anonymity was enforced in order to ensure that the readers of the report cannot identify specific participants who have shared information (Flick, 2014:59). The researcher achieved the participants' anonymity by developing codes for campuses and participants and constructing themes for the pending interviews, transcriptions and the written response format. The fourth stage focused on the actual data collection process followed by the discussion of collected data, the interpretation and the project aims and objectives including verification resulting to the findings. The fifth and last stage was the final attainment of the project aims and objectives, including the construction of meaning and arriving at conclusions.

4.7 PILOT STUDY

The wording of a questionnaire is important and pre-testing is essential to safeguard its success. One of the most significant purposes of a pilot study is to increase the trustworthiness of the study (Morin, 2013:547). The pilot study therefore served to check the clarity of the questionnaire items, the instructions provided and layout; to receive comments on the validity of questionnaire items; to remove vagueness or difficulties in the wording; to receive comments on the type of questions and their format; to receive comments on the appearance of the questionnaire; to receive comments on the layout; to check the time taken to complete the questionnaire; and to detect misinterpreted or non-completed items.

Consequently, a pilot study was done to test the questions and to eliminate possible problems. It involved lecturers in other Accounting modules at both campuses, as well as the promoter of the study. After the pilot study, the draft questionnaire was received back from all scrutinisers and the necessary adjustments were made, after which the final questionnaire was compiled and printed.

A similar process was followed with the interview schedule where all interview questions were checked by Accounting lecturers not involved in this module, as well as the promoter of the researcher.

4.8 DATA COLLECTION INSTRUMENTS

Qualitative research employs different and unique instruments and procedures in collecting data. For this study the main data collection instruments used to gather qualitative data were open-ended questionnaires and individual interviews. Data collection instruments share one common aspect, namely that the participants are the primary source of data and also become co-researchers, considering participants' involvement and proposed solutions during the qualitative research procedures (Creswell, 2014:257). Consequently, qualitative research procedures were all established for this study, the researcher formulated the questions for semi-structured interviews, open-ended questionnaires, and the protocol of audio-recording the interview data was established (Johnson & Christensen, 2008:203; Cohen *et al*., 2011:537; Leedy & Ormrod, 2013:143; Creswell, 2014:189).

4.8.1 Questionnaires

The questionnaire is a research self-report data collection instrument used to gather data which each participant completes individually (Babbie, 2007:246). According to Johnson and Christensen (2008:203), a research questionnaire is a data collection instrument that participants complete for the purpose of providing their experiences, feelings, attitudes, facts, opinions, beliefs, values and perceptions, personality and behavioural intentions about the research phenomenon. Open-ended questions enable participants to express their views freely on questions posed to them. Open-ended questions provide self-expression and richness of information needed for the study and allow participants to express their answers as they wish, without any guidelines or restrictions by the researcher. The use of questionnaires made space for unanticipated findings to be discovered (Kreuger & Neuman, 2006:273), as participants were made aware that their anonymity was secured.

Questionnaires with clear instructions were administered to students in the lecture halls as described earlier in the study. The following are important in this regard:

- A total of 68 questionnaires were distributed to student participants on both campuses;

- On Campus 1, 36 questionnaires were distributed and returned immediately, while on Campus 2, 32 questionnaires were administered, but only 24 questionnaires were returned;
- Questionnaires for both campuses were completed anonymously.

A total of 68 questionnaires were issued and 60 questionnaires returned. A return rate of 88.24% was achieved.

4.8.2 Interviews

Semi-structured face-to-face interviews were employed for all lecturers who took part in this study. The researcher wanted to establish the participants' opinion, views, attitudes and beliefs with regard to the phenomenon under study (Hope, 2011:14). The researcher used a pre-prepared interview guide. Prior to the actual interviews with lecturers, the researcher sent out letters requesting their participation in the research (See Annexure C). At this stage clearance/ permission letter has already been received by the necessary university committees as mentioned before. Participants were encouraged to speak freely about their experiences using their own words. The researcher conducted all face-to-face interviews in the offices of the lecturer participants. Each interview lasted between 45 minutes to one hour.

Two days after sending letters the researcher contacted lecturers telephonically to confirm their availability and to arrange appointments for the actual interviews. The researcher arranged for appointments to ensure availability in respect of the research sites so that there is no necessity for frequent visits. In order to ensure more clarity on the matter regarding exact times for interviews, further telephone conversations were established with the lecturers. During the initial preparations for interviews the researcher built good relationships with the participants by informing them about the purpose of the study. In all these interactions the participants were given ample chance to ask questions where clarity was needed.

The relationship between the researcher and the participants before the actual interviews is very crucial because this lays the foundation of understanding the

expectation of each other in the process of the research. Prior to interviews participants were made aware of their rights in continuing with the interview process and that they have the freedom to withdraw at any time should they feel uncomfortable with the interview.

According to Bergold and Thomas (2012:4), the willingness of participants in the research process indicates their ability to share their knowledge and experience with regard to the problem under study. This translates to deep information and new knowledge production (Thomas, 2010:297; Clavier, 2012:18). Once the participants have realised that their participation in the research is voluntary, they normally provide truthful information. The researcher sought permission from interviewees to audio record the interviews in order for responses to be captured.

4.8.2.1 The use of audio recording

An audio recorder and voice recorder of a cell phone were used to record the interviews to ensure back-up copies are available if needed. Reasons for recording audio of the interviews are (Bryman, 2012:504):

- It provides the researcher with all the information as has been given by the participants and enables for transcription. If the researcher had to listen and take notes she would have missed more important aspects, so the audio recordings were of great assistance.
- It enables the participants to share their experiences of the topic under research and even encourages them to come up with a solution to the problem under research. As the researcher was not actually writing, for example taking notes when participants were speaking, it encouraged the participants to feel relaxed and that they would add value to the research.
- Audio recording makes it easier for an audit trail of the information; the researcher can still go back and track as to how one participant has given information in exact words.
- The interviews allowed the researcher to observe the participants when they were asked a question, to see the attitude towards certain questions or issues,

how participants interpreted the questions and check their clarity on certain facts.

The collected data was saved on the researcher's lap-top computer with a protected password. After all the interviews were completed, all the recordings were transcribed.

4.8.3 Observation and taking notes

Observation tools within the qualitative research provides the researcher with an opportunity to explore participants' life experiences (Cohen *et al*., 2011:396). The researcher conducted all interviews personally. As audio recordings ensured all data was captured, the researcher had the opportunity to make notes during interviews and to observe non-verbal gestures, facial expressions and any emotion shown by participants. During the data analysis' stage the researcher read the notes with the audio transcript.

4.9 DATA ANALYSIS

An interpretive approach was employed in this study to analyse data. According to Okeke and Van Wyk (2015:22), an interpretive approach to research aims at understanding, describing and interpreting participants' opinions with regard to the topic under study. Furthermore, the interpretive approach is imperative to look at participants at their own social and historic context with the aim of gaining a better understanding of participants' experiences. Interpretive approach fits well with the social constructivism as the theoretical framework of this study, as both appeal to transforming the understanding of social reality into the social science (Collis & Hussey, 2009:56-57; Rubin & Babbie, 2010:37). In this study the data analysis started immediately after the first interview was completed with the transcription of the audio recording. This was a parallel activity of the interview processes. The transcription after every interview made work simpler because it assisted the researcher to identify the general patterns at an early stage.

The transcripts, notes from the interview and responses on questionnaires were all analysed following the thematic steps as suggested by Braun and Clarke (2006:86)

and through careful reading and re-reading of data the researcher identified a pattern within data where themes were constructed through the related issues that appeared to be more dominant and they became categories for analysis (Fereday & Mui-Cochrane, 2006:82).

Figure 4.1 illustrates the schematic representation of the process of building themes and categories from interviews and questionnaires. After receiving all the questionnaires from participants the researcher started by labelling each and every questionnaire document and read through the responses to find the related issues. The researcher read the data repeatedly, breaking it down and building it up again through the process of building themes and categories, as Terre Blanche, Burrheim and Painter (2006:324) suggest.

Figure 4.1: The process of building themes and categories

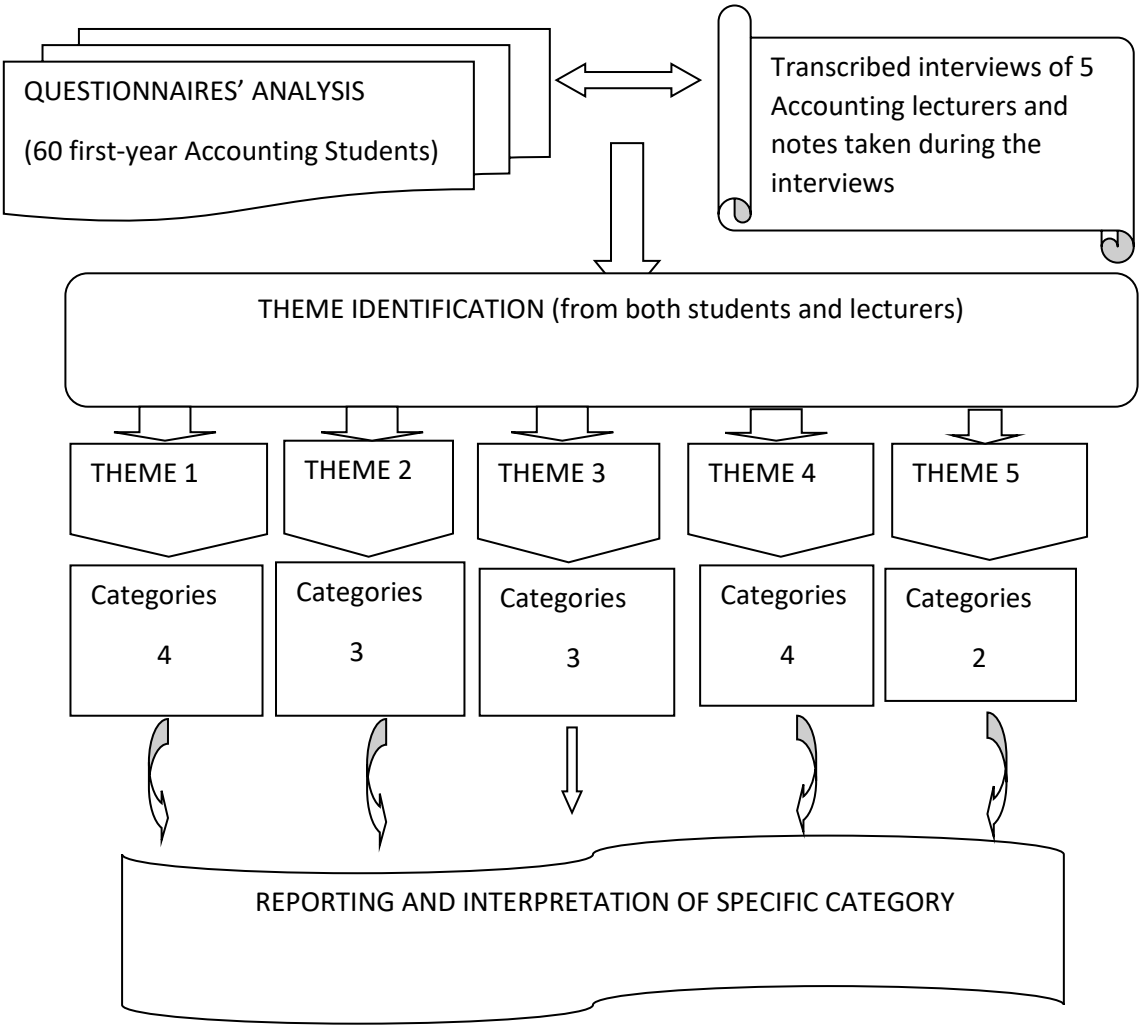


Figure 4.1 illustrates the number of questionnaires received from participants and construction of themes as per participants' responses. Therefore, the text of the questionnaire was transcribed the same way as in the interview process and finally, themes for both interviews and questionnaires were combined. These themes are discussed in Chapter 5 of this study.

4.9.1 Data coding and categories

Coding is an important part of qualitative data analysis and is the process of grouping qualitative responses into categories that bring together similar ideas, concepts, or themes that have been developed (Theron, 2015:5). The researcher read the interview transcripts and questionnaire data and divided data into meaningful analytical units as suggested by Maree (2007:105). The researcher then synthesised the units into

themes and categories as illustrated in Figure 4.1. The names of themes were finalised as described in Table 5.3 (Chapter 5) for both questionnaires and interviews.

Once the data coding and categorisation of both the data from questionnaires and interviews were completed, the researcher had to ensure that the results obtained in this study reflects the characteristics embedded in the trustworthiness principle.

4.10 TRUSTWORTHINESS

Lincoln and Guba (1985:29) originally proposed the now well-known four criteria for providing soundness to qualitative research. They offered these criteria as alternative to the more traditional and well-known quantitative criteria. Their view was that the four criteria better reflect the fundamental expectations involved in qualitative research.

Table 4.3: Criteria constituting trustworthiness

Aspect	Qualitative Term	Quantitative Term
Truth value	Credibility	Internal Validity
Applicability	Transferability	External Validity or generalisibility
Consistency	Dependability	Reliability
Neutrality	Confirmability	Objectivity

Source: Lincoln and Guba, 1985.

4.10.1 Credibility

Credibility is defined as the confidence that can be placed in the truth of the research findings. Credibility establishes whether or not the research findings signify credible information drawn from the participants' original data and is an accurate analysis of participants' unique views (Anney, 2014:276). According to Kumar (2014:368), the credibility criteria involves that the results of qualitative research are credible or realistic from the viewpoint of the participant in the research. The purpose of qualitative research is to define or understand the phenomena of interest from the perspective of the participants and therefore they are the only ones who can justifiably review the

credibility of the results. Clear parameters for a study are set to ensure that credibility of such a study is maintained. Only participants who are able to offer in-depth data regarding the phenomenon at hand formed part of the sample of this study. The researcher made a PowerPoint presentation of the planned proposal at the Campus Research Committee, after which it served at and was approved by the Faculty Research and Innovation Committee.

A qualitative researcher establishes rigour of the inquiry by adopting the following credibility strategies: triangulation, peer review/examination, member checking and prolonged field experience. These are elaborated in short below.

4.10.1.1 Triangulation

Triangulation helps the researcher to reduce bias and it cross-examines the truthfulness of participants' responses (Mertens & Hesse-Biber, 2012:75). The triangulation technique used in this study is data triangulation/participant triangulation where different research instruments, namely interviews and open-ended questionnaires were used to collect qualitative data. In addition, different participants were used to enhance the quality of the data from different sources.

4.10.1.2 Peer Review

During the research process, a qualitative researcher can seek support from other professionals prepared to offer scholarly guidance, such as members of academic staff. Feedback from peers also helps the researcher to improve the quality of the inquiry findings (Hadi, 2016:643). The researcher regularly discussed the study with colleagues who did not form part of the research study. Their opinions and experience was used as a soundboard to ensure rigour and correctness during the study. My study promoter played an essential role of providing critical, constructive and continuous feedback throughout the study.

4.10.1.3 Member checking

Member checking refers to data verification and comments on interpretation with the study participants (Petty, Thomson & Stew, 2012:383). Through members' check the researcher gave participants an opportunity to review their statements for accuracy (Harper & Cole, 2012:510). It is the quality control process through which the researcher verifies accuracy of collected data. The findings of the study were given back to the interviewee participants for verification of data. However only two agreed to verify as the rest indicated they trust that the researcher captured the information as per questions and responses. The verification assisted the researcher to correct, and allowed elaboration on issues which participants felt was not captured according to their interview inputs.

4.10.1.4 Prolonged engagement in the field

Prolonged engagement in fieldwork helps the researcher to understand the core issues that might affect the quality of the data because it helps to develop trust with study participants (Lub, 2015:4). The researcher took enough time in the field to make sure that credible data was collected; and spent a whole month gathering data from different participants such as first-year Accounting students and lecturers who qualified to take part in this study. Also, follow-up engagements with some lecturer participants occurred where the researcher clarified responses.

4.10.2 Transferability

Transferability states the degree to which the results of qualitative research are to be generalized or transferred to other circumstances or environments. From a qualitative viewpoint, transferability is predominantly the responsibility of the person engaging in the generalizing. A qualitative researcher can improve transferability by thoroughly defining the research setting and the assumptions that were essential to the research. The context of this study is acknowledged in the literature study, as well as in the subdivisions dealing with the reporting of data and presentation of findings. The researcher who wishes to transfer the results to a different situation is then responsible for making the decision of how purposeful the transfer is (De Vos, Strydom, Fouche &

Delport, 2011:346).

4.10.3 Dependability

The quantitative interpretation of dependability originated on the supposition of replicability. Cohen *et al.,* (2011:434); Symon and Cassell (2012:207) assert that it is predominantly concerned with whether similar results are to be attained if the same thing is observed twice. The point is made however that similar results can fundamentally not be measured twice, because by definition if measuring occurs twice, we are in essence measuring two dissimilar things. The idea of dependability emphasises the need for the researcher to substantiate the ever-changing context within which research takes place. The research is accountable for relating the variations that occur in the setting and how these variations affected the way the researcher engaged with the study. In this study, the experiences of participants were meticulously analysed and accurately described and interpreted.

Dependability is established by, for instance, using an audit trail, which involves an examination of the inquiry process and product to validate the data, whereby a researcher accounts for all the research decisions and activities to show how the data were collected, recorded and analyzed (Bowen, 2009:309). In order for an auditor to conduct a thorough audit trail the following documents should be kept for cross-checking the inquiry process: raw data, interview and observation notes, documents and records collected from the field. All documents and the voice recorder were kept in a secure place where they could not be easily accessed and are available for audit.

4.10.4 Confirmability

Qualitative research is inclined to accept that each researcher brings a distinctive perspective to the study. Cohen *et al.,* (2011:435) state that confirmability refers to the degree to which the results could be confirmed or verified by others. There are a number of approaches for enhancing confirmability. The procedures for checking and rechecking the data throughout the study can be documented by the researcher. A different researcher can play a "devil's advocate" part in respect of the results, and this procedure can be documented. The researcher can explore and define any

negative instances that contradict prior observations. After the study the researcher can execute a data audit that scrutinises the data collection and analysis processes and provides judgements about the possible bias or misrepresentation. A study can be confirmed once there is an audit trail. The audit trail ensures that the research findings are the results of the experience and ideas of the participants, not the researcher's perceptions about the phenomenon under study.

It is important to indicate clearly as to where the data was from, and how data was being collected and transformed into the research findings (Symon & Cassell, 2012:207; Tobin & Bergly, 2004:392). Such an audit trail was followed in this study as it eliminates biasness.

4.11 ETHICAL CONSIDERATIONS

The close relationship between participants and the researcher in the qualitative research raises ethical concerns (Silverman, 2011:152). That is why it is critical to consider ethical consideration in this type of research, to make sure that participants are not harmed in any way. To guard against possible harm to participants and to the principles of educational research, they were made aware of the nature, purpose, usefulness, procedures, confidentiality and anonymity as well as voluntary nature of their participation in this particular study. The researcher informed the participants that there were no incentives or rewards in exchange of their knowledge, experiences and information, rather they were adding value to the body of knowledge and problem solving; also to make sure that there was no deception with regards to the nature of the study (Creswell, 2014:92; Creswell, 2013:174; Gary, 2010:243).

The application to obtain permission for the study clarified the purpose of the study, the topic, research questions and to which participants and sites research would be conducted. Permission was granted from the Directorate of Academic Planning and Quality (See Annexure B). In the permission letter the university specified conditions to which the researcher had to adhere to at all times during the data collection process.

4.12 CONCLUSION

This chapter outlined the methodology that the researcher employed to collect data. The chapter commences with the theoretical framework in order to indicate the research planning for this study and to interpret the research results.

Attention was given to the qualitative method of gathering data. Open-ended questionnaires and semi-structured interviews as data collection methods were scrutinised. The qualitative data gathered through questionnaires and interviews were employed for specific purposes – that of providing information-rich descriptions and explanations of events. The researcher needs to conduct a pilot study as well. This allows the researcher to check whether participants understand questions they will be asked, as well as to acquire comments on the structure of the questionnaire and interview schedule.

The chapter further explained the population and the sample for this study. The population was indicated and the sampling procedure outlined. Purposive sampling was used to gather information from participants. Data analysis and coding of data were elaborated on. After data has been collected, it needs to be summarised and rearranged in order to make sense to the reader. The coding of data allows the researcher to interpret data correctly and to provide an explanation of the phenomenon being investigated.

The chapter concluded with a discussion of trustworthiness and how this was effected within this specific study. With this explanation, the researcher aims to ensure that the reader understands the methods that were followed during the research process.

CHAPTER 5

PRESENTATION OF DATA, ANALYSIS AND INTERPRETATIONS

5.1 INTRODUCTION

In Chapter 4 the research design and methodology for this study was discussed and outlined. Chapter 5 is dedicated to data analysis and interpretations of the research findings as per interviews and questionnaires. The findings of this study were guided by the theoretical framework of this study as discussed in Chapter 2 and also literature from Chapter 3. Themes were constructed with the aim of ensuring participants' anonymity and confidentiality. Codes were attached to participants to protect their identity from people who would be readers of the report.

5.2 CODING OF PARTICIPANTS

The researcher used the following codes to ensure that participants' anonymity and confidentiality is maintained for the purpose of safeguarding their identity. The researcher used codes that were classified in categories per each cluster so that ambiguity in providing meaning is avoided (Salkind, 2011:153).

Table 5.1: Participants' profiles and coding

Campus/group	Codes	Number of participants
Campus 1 (Questionnaire)	Student 1 to 36	36
Campus 2 (Questionnaire)	Student 1 to 24	24
Campus 1 (Interviews)	Lecturer 1 to 3	3
Campus 2 (Interviews)	Lecturer 1 to 2	2

Students completed a questionnaire consisting of open-ended questions and lecturers were interviewed through semi-structured interviews. The findings for both groups of participants had similar responses and from these certain themes and categories emerged. Participants' ideas provide a base for a researcher to construct themes

which are related to literature and the theoretical framework of the study (Sargeant 2012:2). The following section outlines the processing of data.

5.2.1 Process of data analysis

In order to make meaning of collected data from open-ended questionnaires and interviews, the researcher employed thematic discussions to analyse data collected from both interviews and questionnaires (cf. 4.9). Thematic analysis was employed in this study as by its nature it offers accessible, as well as flexible approaches to the analysis of qualitative data in order to provide rich, detailed data (Gale, Heath, Cameron, Rashid & Redwood, 2013:2). Therefore, it can be stated that thematic analysis allows the researcher to be consistent in determining themes, patterns, trends, relationships and behavioural characteristics of participants even if the researcher has options in applying various approaches to qualitative data analysis (Mouton, 2001:108). The steps outlined below allow the researcher to move back and forward between the coded extracts of data.

The following table illustrates the phases that the researcher followed in the analysis process.

Table 5.2: Thematic phase analysis

PHASES	DESCRIPTION OF PHASES
1	Reading transcripts made of verbal data, of notes taken and of written responses
2	Generating codes
3	Searching for themes
4	Review themes
5	Defining and naming themes
6	Generating the report

Each phase is discussed below to provide clarity with regards to the manner in which the researcher arrived at the themes and categories as illustrated in Table 5.3.

- *Reading transcripts of verbal data, of notes taken and of written responses*: The researcher read and re-read transcripts made of the verbal interview data, together with the notes taken during these interviews, as well as data from questionnaires (written responses). The rationale for reading through such transcripts more than once is to become familiarised with the data in an intimate way, as suggested by Creswell (2013:244), as well as scrutinising whether the essential insights that emerged from data have been captured through researcher coding and categorisation. The researcher scrutinised data several times with the purpose of searching for regularities, patterns, meanings, topics and then wrote words and phrases to represent those patterns and topics.

- *Generating codes*: Once sample structure or design, fieldwork procedures, and coding protocols have been developed the researcher generates the initial list of ideas for the purpose of keeping the field notes about what is in the data (Creswell, 2013:244). In the advent of the above having been completed, the researcher designs a form of quality assurance drawn to keep track of fieldwork such as dates of access to the field, period and dates of interviews, length of interviews, list of all the participants, extraneous variables (Mouton, 2001:107).

- *Searching for themes*: From the lists of codes in phase two, the researcher sorted out different codes into potential themes and collated all the relevant data extracts within the identified themes.

- *Review themes*: This relates to refinement of themes and indicates the breaking up of the data into manageable themes, patterns, trends and relationships with the aim of understanding the different relevant elements of the researcher's data through observation and inspection of concepts, ideas and relationships (Mouton, 2001: 108-109).

- *Defining and naming themes*: Indicates that literature study for this research was organised around themes or key constructs derived from the key aim, objectives and research problem (Creswell, 2013: 247). Organising themes in the way adopted above, provides a researcher with an explanation of how key debates in the theories discussed originated and developed up to the point where factual conclusions could be reached (Mouton, 2001: 92). Throughout this process, themes that were selected were supported by data relevant to this study as they were directly drawn from literature.

5.3 THEMES AND SUB-THEMES

For the researcher to analyse and interpret the large volume of raw data collected through the process of consulting the open-ended questions in the form of questionnaires and interviews, a qualitative data analysis process was employed. In order to reduce the large volume of data, the researcher used the system of coding (Wiersma & Jurs, 2009:238), where information gathered was organised and sorted into categories. Through several readings the researcher identified patterns emerging from these categories. From these the main themes and sub-themes were generated (Creswell, 2013:247).

Five main themes were identified from data obtained through questionnaires (students) and interviews (lecturers):

- Theme 1: Students' Motivation
- Theme 2: Adjustment to university life
- Theme 3: Class environment and instructional approaches
- Theme 4: Barriers to academic performance
- Theme 5: Academic interventions to improve performance

The findings focused on the main themes that emerged from the open-ended questionnaires and reading of the verbatim transcripts from the interviews. The aim was to report on data as authentically and accurately as possible in order to ensure trustworthiness. To this end, verbatim quotes are provided to support the reporting

stage of this study. No editing of language errors in these quotes was done. The main themes and sub-themes are provided in Table 5.3.

Table 5.3: Main themes and sub-themes

THEME 1	**STUDENTS' MOTIVATION**
Sub-theme 1.1	Need for accounting professionals in the labour market
Sub-theme 1.2	Career opportunities
Sub-theme 1.3	Working with numbers is inspiring
Sub-theme 1.4	Accounting is analytic in nature
THEME 2	**STUDENT ADJUSTMENT TO UNIVERSITY LIFE**
Sub-theme 2.1	Time management
Sub-theme 2.2	University workload
Sub-theme 2.3	Class attendance
THEME 3	**CLASS ENVIRONMENT AND INSTRUCTIONAL APPROACHES**
Sub-theme 3.1	Class size and academic performance
Sub-theme 3.2	Group work and academic performance
Sub-theme 3.3	Interactive learning and academic performance
THEME 4	**BARRIERS TO ACADEMIC PERFORMANCE**
Sub-theme 4.1	Language barriers
Sub-theme 4.2	Mathematical barriers
Sub-theme 4.3	Financial barriers
Sub-theme 4.4	Students prior knowledge and percentage obtained previously
THEME 5	**ACADEMIC INTERVENTIONS TO IMPROVE PERFORMANCE**
Sub-theme 5.1	Extra classes and students presentations
Sub-theme 5.2	Intervention programmes

These themes are discussed in detail to present the major findings, based on open-ended questionnaire responses from students and interview responses from lecturers.

5.4 KEY FINDINGS

The key findings that emerged from the empirical data are now presented. To offer the reader greater depth of understanding and to ensure that participants' voices are heard, as suggested by Saldana (2009:74), the researcher included verbatim quotes from participants to confirm and justify important findings. The themes that emerged from the data are listed together with the data findings below.

Abbreviations are used when referring to student and lecturer participants. For example, Student 26 from Campus 1 is abbreviated as S26:C1 and Lecturer 1 from Campus 2 as L1:C2 and so forth.

5.4.1 Theme 1: Students' Motivation

Sub-theme 1.1: The need for Accounting professionals in the labour market

Students' responses:

The majority of students stated that there seems to be a shortage of black accountants in South Africa. The participants indicated that students who are interested in an Accounting career, lack support to pursue the career in Higher Education. They further indicated that if they achieve the qualification it is possible to get a job since, according to their view there are few accountants in South Africa. Therefore, they are of the opinion that they will fill such a gap in the labour market when graduating. S5:C1: "*It is because in South Africa we have problems with black accountants and I am also aware of the scarcity of graduates in the field of Accounting which I think might increase my prospects of finding a job after graduating, even though there is not much support from our lecturers.*"

Participants also indicated that it is not only about black Accountants, their view is that females seem not to be feasible within the Accounting profession. They have indicated that they have noticed very few female Accountants practising within the Accounting industry and they would like to form part of this viable industry in their home towns. They view the industry as unpopular to blacks and female candidates. Some of the female students expressed their preparedness to break the monotony of very few

females and majority of males practising in the finance industry. S19:C1: *"I have enrolled for accounting because I have noticed that there are no female accountants that I know of."* The same sentiments are shared by S4:C2 who indicated that she/he has never come across a female accountant within her/his district. They further indicated that based on the shortage of Accounting professionals, they cannot be accessed in many small towns in South Africa. Therefore, the participants indicated that because of the non-existence of professional firms within their areas, they see that as an opportunity to find jobs and create ones for others in their own towns in the future. *"In my area I have never heard or seen any female accountant so I want to be the first one called accountant and be an employer of others."*

Moreover, other students indicated that due to a scarcity of the Accounting profession within the country, some of them want to open their own Accounting firms. They mentioned that the first time they were exposed to an Accounting firm was when they were taken for an educational trip to a big city. They felt that they would be the first ones to launch financial services in their own home towns. S7:C2: *"We do not have any financial firm in my area so I want to open one. I learned about this firms when we took an educational trip to Johanesburg (Johannesburg)"*

Participants further indicated that Accounting as a profession is attractive and guarantees a future for graduates. Students have a feeling that the demand for this profession is high as there are few Accounting graduates. Some students asserted that the Accounting field presented various job opportunities, so they have plenty of choice in the same field. S1:C1: "*The field of accounting is interesting and I see a need for accounting in the labour market."*

Student participants also reported that the corporate world needs more than what can be provided to meet the demands. They stressed the point that skills supply and demands is very challenging in the South African labour force. They indicated that very few are being produced from the universities as Accounting graduates and the services expected by the public from the graduates surpasses the qualified accountants in the workplace. S15:C2: *"Demand of accountants exceeds the supply."* Other students have also identified that they have noticed the need of accountants in the labour market as early as high school. They indicated that when applying for

university admission few were applying for Accounting degrees. They further indicated that only a small number of their classmates were applying for the qualification, therefore in the labour market the demand will be high once they complete their studies. S11:C2: *"Very few of us have applied for Accounting qualification from high school for our first admission."* The same sentiments are shared by students who indicated that few of them were doing Accounting during their matric level the majority were doing other subjects. Students indicated that the shrinking of the number of Accounting students in a high school class, showed that the profession is not for everybody. S27:C1: *"In high school we were only six in a class, which made me to think that the career in accounting is very uncommon and not for all."*

Some students mentioned that their parents view Accounting as a high-skilled subject that can open career opportunities for their children in future. So student participants indicated that based on their parents' views, Accounting is a skill in high demand, more so than other subjects. Participants indicated that their enrolment is being influenced by their parents. S23:C2: *"My parents told me to register accounting at the university because is a high-skilled subject in state of over popular courses."*

Other students indicated that they registered for Accounting because they have noticed inadequacy of knowledgeable people in the labour market. However, many of students are not keen to enrol for Accounting because they claim that it is strenuous and it takes long before completing as a qualified accountant. Certain students made it clear that they have taken that as an opportunity, whereby others are making excuses about the completion time-frame and the strain of the subject. Student participants said that they are confident of obtaining work after completion of their qualification, as they would not have much competition, because many are not prepared to study that long before qualifying as an accountant. S17:C1: *"As others are running away from the course complaining that it is difficult and cost a lot of money I can see some of us not going to compete for work when we complete."*

Lecturers' responses:

Lecturers pointed out that due to high demand of qualified accountants or people with an Accounting qualification in the labour market encouraged students to be more determined to enrol in first-year Accounting against all odds. Lecturers asserted that

students are attracted because they are aware that Accounting is classified as a scarce skill within the South African context and globally. They further indicated that the black students seem to be the ones enrolling in high numbers every year; they have also noticed that black Accountants are scarce in the corporate market within the South African labour market. Lecturers view the demand of Accounting skills as the motivating factor for students to keep on trying. They also indicated that students perceive better chances of employment within the Accounting industry once they have an Accounting background and knowledge. L1:C1: "*I think for students who continuously registering even after so many disappointments, is because of the knowledge they have that Accounting qualification is recognised as a scarce skill and shortage of black accountants, therefore there is somehow future guarantees that they will find employment somewhere".*

In addition, other lecturers have indicated that students are persistent in Accounting because they have identified a knowledge/skill needed within the country and globally. Lecturer participants also indicated that a high demand of Accountants seems to be a global epidemic. Lecturers indicated that students view their job opportunities as global and not confined to South Africa. L1:C2: *"Students are aware that accounting qualification is scarce everywhere in the world as well as employment is not restricted in their country."* Furthermore, other lecturers indicated that once students were successful within the Accounting field, there would not be any turning back. The lecturers affirm that graduates would not be jobless as the course presents so many opportunities. They further indicated that certain students do not seem to take responsibility for their learning. L2:C1: *"There are many opportunities for students who have done accounting at the university. However they do not show much enthusiasm on their studies I do not even know how they will succeed in the accounting career."*

Participants also pointed out that students may be aware of the poor employment growth in the industries that previously employed many people in South Africa. Participants indicated that the mining and manufacturing industries used to employ people at low wages but now these industries are also anticipating to employ qualified people from Educational training institutions. The country is also looking for highly qualified individuals but those companies are not employing many people. Students are aware of the demand and they want to become part of those who will add value to

their country; and they see Accounting as a sustainable career. They think that other universities are offering higher qualifications and that is the reason their university does not get the best quality students. L3:C1: *"It looks like our students lately are aware of absence of low-wage job in the manufacturing and mine industries in the South African context and they are now moving to the high skilled qualification with the hope that they will get better jobs after completing their qualifications. However the students we admit here are not cream from matric. The most clever (Cleverest) once went to other universities. Ours are second best. I think is because we offer diploma not degree nor higher diploma in accounting."*

Interpretation: It is evident from responses that the majority of students are studying Accounting because they are aware of the current job opportunities within the South African labour market. The interesting thing is that student participants indicated that the shortage is mostly of black and female accountants, hence the noticeable increase in the enrolment of Accounting at the first year of study. However, the reason for this state of affairs is that students repeatedly register for Accounting although they may face disappointments immediately. The reason for re-registering for the second and even third time for a subject failed at first year of study, is that it offers better employment opportunities; many see an opportunity of opening their own Accounting firms in their home towns.

This sentiment is echoed from the perspective of lecturers who feel that black students (although attracted to the subject) do not show commitment, miss some lectures, do not practice the practical part of the subject as expected and most importantly, fail to conceptualise the concepts in the subject. Another point of departure here is that the institution concerned fails to select the required cream of the crop from the applicants. It seems selected students lack knowledge of the subject and the capability to carry the load at university level. In simple terms, students fail because they are not practically and/or initially well prepared to handle the weight of this mass. This situation ends in frustrations to both the lecturer and the student.

Considering the current trends taking place in the South African job market and in the economy at large, the researcher is also of the opinion that there is indeed a scarcity

of Accountants. The scarcity and high-skilled nature of Accountancy attracts students to enroll for it.

Sub-theme 1.2: Career opportunities and academic performance

Students' responses:

Most students responded that the field of Accounting has many work opportunities. Students have the perception that once one has acquired knowledge of and graduated in the field of Accounting, there is a high probability of employment. Examples of employment put forward were Accounting clerk, Bookkeeper, Chartered Accountant and Internal audit manager. Student participants further indicated that the way they perceive the Accounting field is that it presents job security and a diverse range of opportunities. They mentioned that choice will be theirs after completion as to which work that they would like to do. S25:C1: "*This field has many opportunities, for example, you can be a secretary, bookkeeper, and chartered accountant. I think once I am done with my studies I will be doing something in the Accounting industry based on the types of jobs that one can grab."*

Similar views were expressed by S16:C1 who contended that '*there are plenty of jobs within the Accounting field*". Upon completion, students foresee themselves at liberty to add value to the country's state of affairs. They claim that once they have obtained Accounting qualifications, they think the country's financial status will stabilize. They perceive themselves as saviours of the country on the issue of financial management. They think that on completion they will be highly qualified and the country will need their skills to uphold the country's financial management. Furthermore, they indicated that they were under the impression that their lecturers would continuously motivate them to work hard towards their goals but that in reality they do not receive any sort of inspiration from their lecturers. S21:C2 *"This field got ample opportunities and it's very important because having qualified people within the field will contribute positively in the financial sector of our country, the country's economy will be firm. Because there would be citizens who can be able to handle finances properly, after all I have passion for the subject. Even though we do not get much encouragements and motivations from our lecturers to work hard."*

In addition, students indicated that they are attracted to the Accounting profession because they have heard from others that once an individual has graduated from the Accounting discipline, the salary is appealing. Therefore, they commented that the salaries they hope to earn within the Accounting sector is a driving force for their continuance year after year to enrol for Accounting. They indicated that they feel proud to be known as a student pursuing an Accounting qualification. They remarked to others that Accounting students were perceived to be intelligent, that is why they want to maintain the status quo. S24:C2: "*I am in it for the money, to be honest, I hear it pays well plus telling people that I'm in the accounting field makes me come across as sophisticated and very clever."*

Lecturers' responses:

Lecturers indicated that according to their view students enrol for Accounting for specific reasons. They asserted that students are focusing on the final product, namely their qualification, not considering the number of times they are re-registering for the same module. They affirm that to students several registrations do not bother as they have their goals to achieve. Lecturers further indicated one of the specific reasons for students of having courage for years and not abandoning first-year Accounting is because students have a perception that they will earn a lot of money and make a better life for themselves. A lecturer participant stated that some students study Accounting only to earn a good salary upon completion. This participant commented further that in some cases students only study Accounting because it was recommended to them by their parents, relatives or friends. L1:C2: "*Some students just choose Accounting because they think they are going to make a lot of money in future if they can be Accountants, or… some other people or parents told them to do Accounting, because people who have done Accounting are getting a lot of money. It is like they will just receive money by just enrolling for Accounting as a subject. I think they have a wrong impression of Accounting as career opportunity for them, because they are not hard workers for the profession."*

Participants also indicated that they are aware that students are attracted to Accounting because it is the course that enables students to succeed at anything in the business world. They mentioned that Accounting has a potential of opening doors to every kind of business for those who have an Accounting background. They said

students who have done Accounting have competitive advantage over the courses that do not have any elements of Accounting in them. They indicated that there is a likelihood that Accounting students are favoured above other students in the labour market. They said with other courses students seem to struggle to get employment. L2:C1: "S*ome students studied Accounting qualification because is exposed to many career opportunities than someone that studied HR or Language Practice, whom in actual fact they are not even sure as to where are they going to be absorbed in the labour market."*

In addition, participants indicated that even though students are fascinated and are aware of the opportunities that the Accounting industry provides, they do not seem to understand the effort that they need to invest in order to succeed. They stated that Accounting students appear not to realize that they need to apply more effort than other students. However, they need to further their studies and meet the qualification pre-requisites. Lecturers clearly stated that to become a qualified accountant is not an easy task, many sacrifices need to be made by the candidate. That is how L1:C1 puts it: *"Students should work hard in their accounting diploma. To become accountant need hard workers. They have to enrol for honours and serve articles for at least two years and then write board exam before they can become qualified CA to get there is not an easy process."*

Furthermore, participants said that to become an accountant they need to have completed a BCom (Bachelor of Commerce in Accounting) degree from an accredited university. They made it clear that not all universities could offer qualifications that could lead to CA qualifications. They explained that there are universities registered with the board of Accounting that are allowed to offer the accredited courses. They pointed out that besides the relevant degree they (students) need to serve articles (this is an internship), working in certain companies as trainee for three years. On completion they can look for a position as Chartered Accountant. However according to lecturer participants, students think that they would just easily get a job, not being aware that the money that they have been told about or perceived to be their goal, comes with intensive pressure and hard work. L3:C1: "*They further need to register BCom Accounting degree with the accredited university, upon completion of their diploma there is also three year learnership that they have to complete. They seem to*

have misconception of career opportunities as if they just walk in their dream job and earn big bucks. Their diploma serve as a foundation."

Interpretation: In relation to academic performance and career opportunities the study has established that students have identified opportunities in the Accounting field and have also developed a positive attitude towards career opportunities. Accordingly, lecturers believe that some students pursue the subject for future career opportunities. The standing impression here is that Accounting, compared to such fields of study as Human Resource Management (HR) or Language Practice, one stands a better chance of employment and a brighter future. If this is the major reason for students to enrol in this subject, it is not evident that such a graduate or diploma qualification will secure employment. Key attributes for employment and to earn a better salary in future, requires students to possess characteristics like hard work, dedication, self-efficacy, self-expression, appearance and many other valuable elements of job requirements. The fact is that students register for Accounting because they want to hold certain positions upon completion of their qualifications, such as Chartered Accountants, auditors and other sub-disciplines within the Accounting field. The perusal of the above quotes indicates that in addition to job opportunities that are perceived to be available in the field of Accounting, personal status is also an important issue that Accounting students aspire to possess.

Participants' responses concur with the suggestion made by Berg (2015:2) which maintains that career and educational aspirations are encouraging students' interest and ability to achieve their goals. It is in this way that students' ambition stimulates interest to work towards future career opportunities and their career choices of which Accounting is an important one. Therefore, in any academic qualification, students will ultimately need to supplement that qualification with either experience, exposure, or carrier-oriented training. Therefore, in view of the above response, the researcher possesses no contention with regard the diplomats and graduates being exposed to learnership and or apprenticeship training. This route if followed could guarantee students' employability and credibility in the job situation.

Sub-theme 1.3: Working with numbers is inspiring

From the above-mentioned sub-theme, lecturers did not have anything to comment on because there was no direct question that was specifically addressing whether students have enrolled for Accounting because of the inspiration in working with numbers. However, lecturers commented on other factors that might be motivating students to enrol for Accounting, except that of the nature of the subject.

Majority of student participants stated that the practicality of calculations encourages them to enrol for Accounting. Student participants indicated their passion for Accounting specifically is because they are mostly dealing with figures, not much reading and narrating long stories. S23:C2: *"I love working with numbers, I have always preferred Accounting than any other subject, because with Accounting one never get bored, there are figures that needs to be calculated in order to do the recordings of the transactions."*

Some students maintain that they have registered for Accounting as a subject because they are interested in being challenged by the logic and numbers found in Accounting. S3:C1: "*With numbers there are no dull moments."*

Participants also viewed Accounting as a subject that develops critical thinking and sharpens one's mental calculations. They consider Accounting as a subject that brings life and energy to their cognitive ability. They further said that Accounting drives their ambitions to undertake more tasks and build their confidence in calculation capabilities. This is how S18:C2 put it: "*Accounting is a very interesting subject because it sharpness my accuracy in calculations and challenges my thinking."*

Participants indicated that the figures in Accounting are enjoyable as compared to other subjects where they have to read. In Accounting they are only expected to understand the requirements and follow instructions in order to address the task accordingly. Therefore, they prefer Accounting to other subjects that require comprehending much information before they could understand the core of the subject matter, whereas in Accounting, what mostly is required is understanding the transactions. S5:C1: "Out *of so many subjects that I have* the *enrolled for in this*

programme I enjoy accounting, because in accounting every transactions requires calculations rather than reading and absorbing a lot of information."

Certain student participants felt that their reasons for enjoying numbers is because they are able to make an interpretation of the work that was initially done by them. They indicated that it becomes easy for them to understand and make interpretations and analysis of their own calculations. S14:C2: *"I like working with figures as I will be able to interpret and analyses the final answer from my own calculations."* To strengthen the case some student participants argued that the most interesting parts of this subject is for example, the principles of Accounting, the balance sheet and other Accounting transactions and/or recordings of those figures or numbers in the proper financial books. S21: C1: "*The calculations of the transactions and being able to record them in correct financial books is what makes me more interested in accounting."* In addition, participants mentioned that their passion and love for Accounting started as early as when they were doing Accounting as a subject in high school. They said that was when they found Accounting as classified subject among the commercial subjects more fascinating than others. They further pointed out that when they are engaged with Accounting tasks they do not get discouraged or bored as everything challenges their thinking. S3:C2: *"I have always been interested in commerce subjects since high school. So I figured out my passion working in numbers, with numbers there are no dull moments. Accounting is a very interesting subject because it sharpness my accuracy in calculations and challenges my thinking."*

Interpretation: It is clear that majority of students need to be challenged in what they do. Therefore, Accounting is meant for those students who can master calculations and work comfortably with numbers. However, the core of the matter relating to students' ability to pass Accounting rests with not only passion for the subject, but also commitment and regular practice. When these approaches are employed (passion, commitment and practice) it is guaranteed that academic success will become a reality (See section 2.4.1).

Student participants echoed Spearman's two-factor theory which maintains that individuals with high "G" *(abstract thinking abilities)* factors have a high possibility of succeeding in intellectual tasks, such as working with numbers and calculations.

Additionally, Parankilil (2014:2) points out that students with “S” *(intellectual ability)* factors acquire skills and abilities to solve emerging challenges in fresh situations. Based on the “G” and the “S” factors it is interpreted that there is a clear alignment between motivation and these two factors as these factors influence the level of motivation.

Sub-theme 1.4: Accounting is analytic in nature

Responses for this sub-theme are only from students who were asked questions that related to the nature of Accounting.

Students commented that the analytical nature of Accounting activates their concentration, is attractive, is interesting, and compels them to tackle Accounting as a subject. S35:C1: *“I love challenges, also to analyse and in accounting you use your mind and analyse.”* Participants also indicated that due to the analytical nature of Accounting, it allows them to use high-order cognitive skills in order to construct long-term understanding. They said the requirements of the subject makes them dig deep to have a clear understanding and get the logic behind calculations of transactions and certain percentages. Therefore, student participants seemed to be stimulated by the difference ways in learning Accounting, the reasoning that they have to do for every answer and the recording of the answer to the correct financial books. S16:C2: “*Accounting is unlike other subjects because it does not promote road learning but the one that challenges our thinking. I found Accounting challenging due to its analytical nature. However with Accounting I have to reason out as to how those percentages are calculated and how to reflect them in financial books.”*

In addition, some students felt that before dealing with any calculation that needs to be done in Accounting, one must contemplate the figures and percentage that one needs to work on. S2:C2: “W*hat I study in accountancy is that you need to think hard before you could be able to calculate a certain amount, of which it is exactly what I love about it.”*

The same sentiments about the challenges of the analytical and ethical nature of Accounting yet inspiring were shared by some student participants who asserted that

analytical and ethical factors of Accounting as a subject, keeps them very organised and honest in everything they do that is related to financial activities. They indicated that with calculations and recording they follow rules and procedures in order to do things correctly and honestly. S4:C2: *"I like analytical challenges one has to face as an Accounting student and the ethical conduct within accounting that have to be learned in order to be honest when reporting the financial transactions."* Participants also indicated that there is a systematic way of doing things, therefore mistakes in future are expected to be very minimal, as good process and practice are adhered to throughout teaching and learning. Therefore, they have become passionate about the course as it taught them not to make any financial mistakes. S11:C2*: "I am fascinated by the way in which accounting is practised. The systems and rules set out are very clear and leave no room for error."* Furthermore, certain student participants emphasised the critical importance of being able to analyse Accounting transactions correctly. Students view the understanding of and correct sources of documents for every transaction as a bridging gap that would enable them to analyse and record transactions correctly. S9:C1 commented in this way: *"What I like about accounting is once I know the source documents I would be able to make clear analysis and logical recording of all transactions."* S24:C2 echoed the above sentiment by stressing that there are skills that one acquires from Accounting as a subject. Therefore, they regard Accounting to be the subject that focuses more on self-development. *"I like accounting because from accounting I improve on analytical skills."*

Some students indicated that their financial judgments are influenced by the rules and procedures of Accounting records. They further indicated that they find Accounting empowering their lives because it instils honesty and integrity in their personalities. They follow the rules in financial reporting and everything they do should be transparent. S21:C1: "*I like accounting because we learn some financial morals as presented by accounting rules."* Student participants further emphasised that the knowledge they will acquire from Accounting as a subject, will assist them to start their own businesses and understand the process and procedures of the economy and be a leverage for managing their own finances. They evaluate Accounting as the subject that enables them to acquire personal gains. S20:C1: "*I like working with big numbers and learning about how to manage financial accounts of the business. My biggest goal is to open my own business one day so studying Accounting will help me to manage*

financial Accounts." Participants also indicated that through accounting knowledge they learn the basic handling of finance, they become financially literate to the extent that they feel they are competent to be in charge of their own businesses. S30:C1: "In *Accounting you learn to put into practice transactions that affect us on a daily basis, with it I can start my own business know how to operate it."* Other participants further indicated that Accounting enables them to handle and manage their finances in a professional way. *S8:C2: "I love managing other people's finances (including mine)."* Participants said they get to understand financial cash flow and the impact it has on the economy. They indicated that cash flow helped them to understand the systematic value that finance has to the benefit of the economy and income or proceeds from the economic activities. S22:C1: *"It gives me opportunity to know more about our economy and how does money flow from different sectors*."

Interpretation: Based on what participants have highlighted, it is clear that they selected Accounting because of its analytical nature. The analytical nature of the subject is what interests' students because it forces them to think critically and creatively. Reflecting on some responses there are reasons that ultimately inspire students to enrol continuously for the subject. Results indicate that Accounting paves the way for participants' dream jobs that are attained to fulfil individual career aspirations. These aspirations activate interests and abilities that are an engine-driven individual desire in the realisation of set goals (Kong, 2009:147). Hence the justification for the influencing factors that compel students to register for the subject.

It is evident that institutions of higher learning with specific reference to universities of technology are expected to shape future Accountants in South Africa so that the demand for this scarce skill can be met. When there is a feasible success in the pass rate in Accounting stability and increased mobility of Accounting personnel will become a reality. It is clear that students enrolled for Accounting because they have different goals as they have stated on their responses.

5.4.2 Theme 2: Adjustment to university life

Sub-theme 2.1: Lack of time management

Students' responses:

Some students claim that intake of intoxicating elements, especially abuse of alcohol is seen as a contributing factor in the ineffective utilisation of time management. As a result of this deficiency, less time is allocated to academic work, thus depriving them from taking responsibility for their studies. They emphasised that they spend less time on their school work than on social activities. This is how S15:C1 puts it: *"Spending time taking alcohol instead of studying and not taking academic work seriously."*

In support S24:C2 confirms that if time is used effectively on academic matters, they can perform well academically. They asserted that non-attendance, and not being on time for classes has an impact on their acquisition of knowledge. S5:C1 is of the opinion that: *"Honouring my classes, coming on time, honouring class times and wasting no valuable time I would have gained something."* In addition, S21:C1 reiterates that students seem not to be focusing on their studies because they cannot manage their time properly. The student reported that if one does not adhere to time management, it would lead to loss of focus on school related issues and result in being behind on all aspects. They indicated that their inability to manage their time properly was a factor that inhibited them from focusing and they ended up panicking about exams. For example, the following are some of the comments students made: *"Lack of focus, no determination, lack of practising but most of all I would say not giving yourself time to do your school work because without time management you will lose focus on your studies and when it is crunch time (examination time) you will realise that you are far behind."* S27:C1 affirmed that lack of preparation before any academic evaluation puts pressure on students. They indicated that the pressure is caused by lack of discipline because they never took any initiative to prepare for academic evaluations:.*"We don't give ourselves enough time all we do is we relax then at the latter stage when the test or exam time comes we feel being under a lot of pressure because we did not prepare ourselves while we still had time to do so."*

Some students indicated that they never put any strategies in place to ensure that they practise Accounting daily. They further point out that non-daily practice results in school work piling up and they find themselves behind in studying other subjects. Students confirmed that due to lack of time management they find themselves studying for any particular subject on the eve of the test. Therefore, students

acknowledge that they do not use time efficiently as they waited till the last minute before preparing for assessments. They confirm that they need a working plan. S14:C2: *"We have an attitude of not having a time table of practising our school work. It means it is difficult for me to balance my time between all my subjects I am doing. I only practice the day that I have to write a test the following day. I think also is what makes me to perform badly because I practice at the 11th hour and Accounting need time, of which I do not allocate for Accounting."*

In addition, participants specified that if they do not allocate sufficient time for their studies they would not achieve in any subject. They pointed out that time is critical in their studies. S28:C1: *"Less time on studying and not practising regularly can have a great impact towards failing the subject."* Furthermore, some students indicated that lack of commitment to their studies fade away their chances of making it academically. S12:C2, set forth the submission as follows: *"Lack of commitment to the subject lead to potential failure in Accounting."*

S19:C2 acknowledged that as students, they lack discipline and they do not prioritise their time and effort for their studies. Furthermore, they bemoaned the fact that some of them do not pay attention to lecturers, do not participate in class and are wasting their own time. They indicated that as students they lack self-discipline which cost them academically. This is how the participants puts it: "*As long as some of us lack of self-control and not prioritising time for our studies and continually not adhering to our lecturers instructions also not taking part in class discussion, we are wasting our own time."* Certain participants asserted that they concentrated most of their time on one subject. They clearly indicated that their concentration on one subject causes them to neglect other subjects. S7:C1: *"I spend use most of my time focusing on one subject."*

Lecturers' responses:

Lecturers are of the opinion that students do not manage their time properly. Firstly, this problem is attributed to students' proximity to the campus. They indicated that majority of students reside far away from campus therefore most of the time they arrive late for classes. They further indicated that their late-coming resulted them missing out the important aspects of the work which have already been dealt with at the beginning of the lesson. Participants affirmed that students' late-coming is an indication of not

taking their studies seriously and being unable to manage their scheduled classes. L2:C1 provided this statement to confirm: "*Our students always come late for classes because they stay far away from the University, that on its own is working against their success because they get to class after so many aspects have already been discussed, our students have a problem of managing their school time they take everything for granted".* Furthermore, lecturers stress the time delayed before classes, *"….they arrives at 8:30. Imagine the first class started at 7:55 it means they have lost 35 minutes of their subject content, those are the things that I think contribute a lot on our first year academic performance."*

In addition, students miss initial or orientation lessons by arriving late. Other lecturers are of the view that students find it difficult to come to classes from the early days of their enrolment, possible reasons considered to being ignorance and lack of time management. L3:C1 stated that: "The *current students we have this years are so ignorant and time to them does not matter much because, they seem not to care much about the initial and orientation about the course."* Some lectures further indicated that due to lack of time management some students miss a lot of information with regards to introduction to the module, course content and assessment information because they do not make time for such information sessions. That is where they miss the essence of how to successfully deal with the course. L2:C2: "Our *students miss out basic information about the course due to not being able to manage their time for classes."* L2:C2 indicated a rebellious attitude through the series of questions.

L1:C2 acknowledged that time is critical for students because important information is shared and discussed in class. Not being on time student may miss clarification on certain topics and the information that serves as the building block towards the entire topic. "Any *time missed for class is a loss to the general and first information for the course, so when students miss out initial information sessions for the course is an indication of mismanagement of time that leads to not linking basics of the course and the course content."* In addition, lecturer participants indicated that students made excuses that they did not know the venue so they got lost, that is why they are late or even miss classes during the first days at university. Lecturer participants further indicated that late-coming is another contributing factor towards students' poor performance and they indicated late-coming impacts negatively on a student's

success. Participants also indicated during the early days of their university, students are not yet accustomed to the university environment as a result they get lost in the process. Therefore, participants confirm that late-coming causes some hindrance on students and compromises their education. L1:C1: “During *the early days of their university days they always say they are not on time because they got lost. Not being on time, therefore they end up struggling on continuity.”*

Interpretation: Findings from the empirical investigation thus confirm that time management is one of the contributing factors that hinders students’ success in the first year of study. Furthermore, lecturers and students attributed that lack of time management to an unplanned approach to study schedules. It is in this manner that Steenkamp *et al*. (2009:4) affirm that lack of time management prohibits students from succeeding in their studies. Accordingly, Indreica *et al*. (2011:97) add that time management is a major resource in learning, because the way people perceive and invest time reflects on their academic results. The consequences of late-coming is that students miss vital information discussed in their absence. Therefore, dishonouring lecturing times as well as failing to plan for study periods remains a contributing factor for poor academic performance. Consequently, mismanagement of time does impact negatively on student goal fulfilment and achievement of education aspirations (Adebayo, 2008: 17). In order to attain time management, one needs to develop a work schedule to focus and plan accordingly.

Sub-theme 2.2: University workload

Students’ responses:

Student participants pointed out that the university workload; schedules between subjects, subject clashes, tests, and assignments are factors that make it difficult for them to cope with the academic workload. For example, at times, students had to write two tests for different subjects on the same day. Student participants also indicated that going from one class to the other sometimes negatively affects their concentration because of too much information from different lecturers in a day. Participants spelled out that continued classes per day without breaks impacted negatively on their comprehension of information. They further claim that they go into some classes very tired and nothing was grasped in the late classes. S7:C2: “*I find university work more*

intense than expected, sometimes I have classes from morning till after 2 without any break." In addition, students indicated that the academic demand at university is far more than at high school. They further indicated that too many tests are given at university. Lecturers just give tests, not considering that they have already been given test dates by other lecturers for different courses. S21:C1: *"At the university we are working harder than high school because there are so many tests within a short space of time for different lecturers."*

The comparison between high school and university has been echoed by other students who stressed the point that there is really a difference in handling academic activities between university and high school. They reported that at high school teachers make sure that students understand a topic before moving on to the next topic, but at university they are just guided to topics and encouraged to explore it further. They further indicated that they find first year of study at university very stressful because they have to take responsibility to cover all topics covered in different courses on their own, without any supervision or any support. They indicated that university tests their academic competence. S22:C1*: "I never expected that university work will test my personal strength and capability like it did."*

The majority of students confirmed that tests are given from all angles, not much time spent on each topic as in comparison to high school. They further indicated that they even found the university term being too short with a lot of work within a limited space of time and they claim that these manifested as factors contributing to their poor academic performance. S15:C1: *"The way things are done at the university is far different from high school, lecturers just impose test not considering that other lecturers have already given test date. At high school there are few topics that we cover than and our teachers made sure that we drill them till we understand here; lecturers are rushing. I do not even understand how long the university term is. For me everything is just too much ways of doing it is too much for some of us that is why we failed first year".* In addition, other students claim that at high school they used to perform well. They emphasised that the work at high school was not as much or as demanding as the university academic workload. They further indicated that their academic performance at high school was never a struggle as in comparison to the university. They asserted that the workload leads them to become victims of stress in

the process of preparations for formal evaluations. S17:C2: *" I encounter so much stress during the exams because of so much amount of work to absorb." as compared to high school where I used to perform well with little effort but here work is more harder and too much."*

Students reported that at high schools their teachers were really committed to ensure that they were prepared for tests. They pointed out that their teachers were practically coaching them on a specific aspect that would be on their evaluation and that this does not occur in their first year of study. They had an expectation to receive more preparation from lecturers regarding tests. Furthermore, at secondary schools the notifications about the tests were done well in advance. S23:C2: "*At high school no clashes and teachers prepare us for a test. Teachers tell us well in advance as to when are we righting a test and there is no way we are going to have test after the other in one day".*

Lecturers' responses:

Lecturers echoed the sentiments of students by indicating that students find university workload being too much. They said at the high school their teachers had plenty of time to repeat topics several times whereas at the university students are not given the chance of going through the work with their lecturers several times. Lecturers further indicated that students find the university work too much because in most of times they have to conduct research in order to make sense of what was covered. L1:C1: "*The challenge here is failure from students adjustment from methods used being the way of teaching at high school to methods applied at the university/tertiary. At the university we do not over emphases the topic students are expected to do self-study, whereas at the high school teachers repeat a topic several times till students master it".*

Lecturers also indicated that the thorny issue is the clashes between subjects' tests that are undertaken at the same day. They pointed out that students find it difficult because some of them are carrying over the course that they have failed the previous year, together with the current year's courses and when tests are given at the same time they find it difficult to cope with the pressure of dealing with courses from different levels simultaneously. L2:C1: *"Our student find workload too much because some*

have already enrolled for second year modules yet still behind with accounting first year."

In addition, other lecturers mentioned that the time-table clashes for those who are carrying first-year modules are not able to attend certain lectures because of clashes. Some students highlighted that they felt over-stretched because of the time-table clashes. They said they find it difficult to be consistent in classes and prepare for different tests at the same time. They said they always focus more on the major subjects and ignore other subjects. Lectures asserted that students are forced to miss scheduled lectures because they must prepare for the day's test. L3:C1: *"Some of the students are overstretched between courses due to some timetable clashes. They also prepare for the test, the very same days of the test and they miss other classes for the day."*

Interpretation: Both lecturers and students agree that having to write two tests on the same day becomes a problem for students. With regard to workload, there are too many subjects done in a semester which normally congests the work programme. For example, the university opens in the first week of February of each year and completes the term in approximately one and half months. The test schedules between subjects are too compressed and students find it difficult to cope with the pressure.

Students' comments were reinforced and supported during the interviews when all lecturers mentioned how first-year Accounting students struggle to align with the way things are done at the university. The implication is that they find it difficult to prepare for the tests that are given at the same time by different lecturers because of too much workload, and too many topics covered within a short space of time. For students this is different from the way they used to do things and it impacts negatively on their academic performance. The students were observed and the result was that they were unable to master the content as the approaches applied at the university were incompatible with their learning styles. This is in line with the findings of Crow and Crow (2007), in Siahi and Maiyo (2015:136) who asserted that if learning habits of acquiring knowledge are not adapting to new situations, and it would be difficult to create new ideas and perfect skills.

Sub-theme 2.3: Class attendance and absenteeism

Students' responses:

The overwhelming majority of student participants postulate that their failure might be due to not attending classes regularly as a result that impacted negatively on their academic performance. S21:C2: "Not *attending classes frequently you get left behind with the tasks done."* Participants also indicated that that they were not interested to do Accounting but forced by their parents to follow the career. S19:C2: *"Lack interest because I was pushed to do accounting by my parents."* In addition, another student indicated that if one does not like the subject one will have a negative attitude towards that particular subject which leads one to abscond classes. Students further raised the point that some of their lecturers are not competent enough and they do not feel they are gaining much from classes, that is why they are not regular attenders. S36:C1: *"Not attending lecturers, having negative attitude towards the subject and the lecturer. Some lecturers are in experienced, there is not much teaching in such classes, and therefore I do not see any benefit."*

Furthermore, other students mentioned that their failure to attend lectures may be ascribed to various reasons, such as lack of transport fare, sickness, and having a perceptual feeling that that they know the work and thus can master the content easily. They further indicated that transport fare and being delayed for classes due to transport issues is a common challenge to majority of students. S11:C2: "I *miss classes only on circumstances beyond my control like transport problem which is a common problem for students who use public transport to travel to campus."* Furthermore, S16:C1 pointed out that sometimes financial constraints contributed towards their absenteeism. *"I live out of Welkom so for me to miss some formal lecturers it's because of financial crisis. But sometimes I arrive 35 minutes late so there is no need to attend when few minutes are left."*

Other participants indicated that they have other responsibilities apart from the academic activities that are supposed to be performed by themselves. They confirm that sometimes they miss classes because they have to fulfil family responsibilities. S10:C2: "*Mostly dealing with family matters."* Student participants further indicated that they could not attend classes without academic resources. They said they feel like

they become outsiders in their own class. They said they rather stay behind to avoid intimidation and negative comments to those who do not have academic resources. Participants went to an extent of not being comfortable to seek assistance from others. They further indicated that health related issues were also a reason that caused them not to attend classes regularly. S10:C1: *"I did not have textbook, so I felt like I was not a student when I am in class and the lecturer will then make a joke about the person who did not bring along their textbook. I felt unwanted and I am an introvert so it is hard for me to seek for help in terms of making copies and etc.*"

In addition, other student participants reported that health/illness related issues force them to visit health clinics instead of coming to campus and attending class. S22:C2" *"Commonly because of sickness. Some other student feel like it is better to study on their own rather than attending classes."* They further indicated that they were absent from certain classes if they are preparing for other classes. S22:C1: *"I was doing self-study inside the library to prepare for myself for the test."* Others said they bunk classes when they have assignments that are due within that week or that day. So they choose to bunk classes for assignments. They indicated that as students they are under the impression that from assignments they will score more marks. S9:C2: "*Some of us we miss classes once were are busy with other assignments of other course. We get marks from assignments."*

Some students indicated that the class is too early for them. Further they specified that a part-time job takes a chunk of their time to sleep and so they sometimes overslept. They said sometimes if they are late for a class they find the door already closed for late-comers. S8:C1: *"Some of the classes are in the morning (1st period) and I would be arriving late when the door is already closed. I work part-time at a clothing firm and I knock off at 05:30 in the morning so I would say it's "a working" problem that causes me to miss lecturers."* Student participants were more upfront with their responses as to what they think can end their continuous failing of Accounting. They reiterated that according to their experience students who are not attending classes are not performing well academically. S2:C2 argues that: "*First of all, absenteeism is an element of failure, so not being in class during your lecture may or might lead you to fail because you would find that a lot of topics are covered in one lecture period.*"

This sentiment is echoed by the comment made by S9:C2, who purports that when they skip classes they miss an opportunity to gain additional knowledge that was discussed within that particular class and might not be repeated anywhere. Further indicated that being present most of the time makes the subject contents and ways of dealing with it become easier to follow. "*Regular attending of lecturers is beneficial because in formal lecture you become able to learn other methods of doing things which are not in the book and you become on par with the lecturer's schedule which eases some pressure."*

Some students confirmed that class attendance plays a key role in improving their academic results. S6:C1: *"Benefits of attendance are that you gain more knowledge, you understand better and therefore you will pass."* This is proven when students avail themselves regularly and obtain better symbols in comparison with students who did not attend regularly. Student participants commented that in reality a sizable number of students do miss lectures and absenteeism eventually contributed to poor academic results. Student participants believe again that it is only through regular lecture attendance that one could be up to date with the content being taught. They also pointed out that regular lecture attendance trains them to adhere to time management, a skill which enhances life-long learning. S24:C2: *"Attendance plays an important role in improving students' academic performance. Students who avail themselves in lecturer theatres regularly obtained greater symbols in comparison with those who did not attend lecturers. One is always up to date with the chapters that were covered, excises that were done and questions get to be answered if a person has them. It's also beneficial to us because we are also being taught time management (arriving on time)."*

The above comments are echoed by some students who asserted that since they started attending classes regularly they experienced good results in all forms of assessment. S17:C1: *"I am currently experiencing good marks and enjoying lecturers and also less depression towards tests."* Other students pointed out that through attendance they have gained a lot of understanding on the aspect of the subject. S9:C1: *"I am a repeating student, but this year I understand much better than previous years because of attendance."*

Some students reported that certain lecturers portray negative attitudes towards them, which they feel is not adding value towards their academic activities. Therefore, they indicated that negative attitudes portrayed by some lecturers' decreases the passion for the subject. They mentioned that they do not feel comfortable to be called by names. Finally, the participant indicated that he/she has a strong feeling or would encourage that special workshops need to be conducted where certain lecturers would be empowered on dealing with students. S5:C1: "*Lecturers should be offered training in order for them to be fruitful as some have terrible attitudes towards students that is why sometimes some of us* do not *attend because we do not want lecturers' attitude towards us. Furthermore*, *they should just do their work and drop their negative attitude towards us, I hate when they call us by names, those negative comments of some of the lecturers are not building instead they made some of us to hate Accounting, not even feel positive to attend*. *I feel that some lecturers need proper skills on how to talk to students*."

Student participants also indicated some lecturers miss vital lecturing periods to attend to their private business engagements. Students thus claim that they fail because lecturers themselves are absent during scheduled lecturing times. S25:C1: *"Lecturers can improve our academic performance in accounting by giving their time to teach, not to go to their businesses at the time of lecturing the students.*"

Lecturers' responses:

The major argument presented by lecturers is that students either possess the notion that they already know the content which they actually failed in the previous year. These repeaters perceive that they know the content and thus need not attend lectures. Lecturers indicated that it is during this time that they miss out on guidance for the tests and examinations since the assessment questions differ from year to year. L2:C2: *"It is like a norm for them not to attend". Feels like to be a repeater one is not supposed to attend classes anymore, they act like they know more than what is already being done in classes. However, they miss a lot of information by not attending classes, the gap between what they have learned from their previous class to the next, becomes difficulty to catch-up. Our problem here is that students do not attend classes regularly."*

Participants also indicated that students are skipping classes because they have a lot of clashes. They indicated that because they are repeating a certain subject within the faculty it may clash with another subject of the second year. Lecturers reported that students seem to attend other classes and skip the Accounting because they feel like they know the work. L1:C1: *"Our students are carrying over modules so those modules clashes and they find themselves not attending classes those that clash with on the time table. Sometime they feel under the same group."*

In addition, participants indicated that some students are engaged more in part-time employment within campuses and outside. The part-time employment does not neatly fit around class schedules and students seem to be missing classes because the class clashes with their work rosters. According to lecturer's reports, students are working in order to cater for their wellbeing as well as their siblings. They asserted that the money that students receive from part-time employment may be the only source of income for their families and they depend on that money for everything pertaining to their lives. L3:C1: *"Some of our students miss classes because they work in the library, cafeteria other claim to be employed by private businesses outside campus to make a living."*

Interpretation: It is clear that lecturers need to be reminded about their lecturing functions as well as professional ways of dealing with students who sometimes proved to be sensitive on issues. This implies that lecturers must also be trained properly in dealing with and treating students professionally in a lecturing situation. In almost all responses, similar conclusions were drawn with regard to the problems caused by absenteeism. Regular lecture attendance was seen as the most probable remedy to failure. It becomes imperative that students realise that when absconding from lectures, they actually start failing. Therefore, it is clear that honouring lectures students have a chance of engaging with each other during discussions and thus have an opportunity to question and benchmark as they interact. By so doing they gain more chance of exchanging ideas, opinions and understanding the subject better (See section 3.5.5).

Lecturers commented that students' lack of class attendance is a negative influencing factor in first-year Accounting performance. During the interviews with lecturer participants, it became apparent that absenteeism by students was a concern. Lecturers highlighted that if students do not attend lectures regularly, there is a missing link between what they should have learned from the previous lecture and the current lecture (that is moving from known to unknown). In that way it breaks the momentum. However every time students miss lectures they have excuses for not attending and it becomes a continuous habit of not attending.

Both lecturers and students' perspective on absenteeism concurred with Steenkamp *et al.* (2009:131), who purports that students with a better record of lecture attendance performed significantly better compared to students who demonstrated poor lecture attendance. Subsequently, students complained and made arguments that lecturers are also not honouring their lectures and have a negative attitude. This is a dangerous scenario because negation leads to negation. This implies that when students have negative attitudes towards a lecturer, it could build on more negation and denial or at times complete rejection of their studies.

Another major issue that was established from the empirical findings was that students' failure and absenteeism seemed to be influenced by the speed with which lecturers rush to complete the unit, module or chapter. The implication is that lecturers start new chapters before students have mastered the current content in the chapter. Hence a different approach to lecturing could assist to overcome the problem; when students fail to comprehend and master all knowledge tabulated per study guide per semester.

5.4.3 Theme 3: Class environment and instructional approaches

Sub-theme 3.1: Class size and academic performance

Students' responses:

Student participants indicated that due to the number of students in their classes they find it difficult to participate. They made it clear that not everyone is able to engage the lecturer or other students during the lecture period. They also indicated that due to so

many students in class, sometimes they do not even hear the information or the content clearly when sitting at the back of the class. They further indicated that audible range of the lecture rooms sometimes deprived them from fully participating. S22:C2: *"The class is too big sometimes some of us we do not even be able to talk or even to hear what the lecturer is saying as we sit at the back of the class."*

In addition, participants made a suggestion of the class to be divided because the current situation is not effective for their learning. They also indicated that even when other students are responding to the answers they cannot hear it clearly as the classes can be noisy and some students speak softly. They indicated that in a smaller class everyone would hear clearly any contribution made by others. They further specified that it is better to be in a smaller class because they would not be made to paraphrase what others said, yet they did not hear. They feel like they are being punished if some will be made to repeat what others have said, or rather a punishment to the one who was talking to be made to talk louder all the time. S9:C1: *"I think I can learn better if our class can be divided into two classes because sometimes we do not hear the responses of others students and I do not like when we are made to repeat what we did not hear."*

Furthermore, participants indicated that they do not get full attention from their lecturers due to the high number of students in a class. Students indicated that the lecturers' attention is very important on their learning. They mentioned that the less the interaction the more they find it difficult to cope with their academic work on their own. Students complain that they do not get much attention from their lecturers. S13:C2: "*Not much attention from our lecturers because we are many in a class."*

Lecturers' responses:

Lecturers indicated that class environments are not conducive enough to allow them to engage properly with students. In other words, the manner in which lecture rooms are structured is not ideal for the lecturer to embark on group discussions for students. Participants also indicated that the set-up in the lecture halls are not user- friendly for effective teaching and learning. They claim that the layout of the halls does not allow the proper cooperative learning to take place, whereby students can work together and share their ideas. The chairs and tables for the classes are fixed, they cannot be

moved around to form smaller groups and allow students to sit in rows as per the class set-up. They further indicated that the classroom set-up prevented the implementation of active group work and forces them to stick to old ways of teaching, where students are sitting in rows because the furniture cannot be moved. Lecturers indicated that the set-up does not allow them to engage at close range with their students and routine checks of group work activities is impossible to do. They also said this is what makes their students become more passive because the engagement cannot be created in an effective manner whereby they can fully participate amongst themselves. L2:C1: *"Lecture halls are structured in a way that a lecturer stand in front and students are supposed to sit one by one. If the venues can be more user friendly in most classes there would be group work where groups will be given different concepts and they teach each other, hope that can assist."*

Most participants indicated that the class size is still a challenge in most of the universities in South Africa. Participants also showed that it is difficult to handle and pay attention to individuals in the classroom due to the large number of students in one class. Participants also indicate that students who struggle with Accounting are not getting enough attention because it becomes a challenge to identify the ones with difficulties from that big number of students in one class. Participants further indicated that they find it difficult even to have lecturer/student relationships and to know exactly what the students' challenges are, unless they came for consultations. L1:C1 asserted: "*It is very difficult to have one on one relationship with every student considering the number of students in a class. I have 130 students in a class and it is difficulty to attend them individually. It is difficult to establish whether all of them understood what was discussed in a class due to big numbers and it is difficult to give them attention to all learners."*

Due to large classes, lecturers mentioned that they take more time to mark the assignments and to provide effective feedback to every student. They indicated that providing comments on student assignments are also difficult as they do not have time to address each individual student with the corrections to be made by that student. They further showed that effective teaching is not sufficient because effective feedback is not provided. L1:C2: "*We have too much homework to mark and giving*

effective feedback for everyone in classroom becomes a challenge. Even to comment on their scripts is not easy due to the high number."

Participants also indicated that because of having many students in one class, some are not taking part in the class activities. They mentioned as much as they could not provide feedback to them, it also becomes difficult for all the students to take part in class discussions during a lecture. They further indicated that learning is not effective where others are not taking part. They asserted that effective learning and understanding is not taking place in a situation where students are not taking part in their own learning. L3:C1: *"What I have noticed in my class because of the high number in one class, not all students are always participating, so learning is not effective."*

In addition, participants mentioned that they find large classes to be noisy. They indicated that sometimes while students are talking, others are busy making conversation which prevents them from gaining from the contribution made by others. They further pointed out that noise in big classes hampers proper learning and teaching because the information to be shared and content to be mastered is not delivered as effectively as it needs to be delivered. Lecturers reiterated that sometimes even what they asked is not completely grasped. They said sometimes the information becomes distorted due to noise that is experienced in large classes. L2:C2: "Sometimes *I find my classes too noisy. The noise level makes it difficult for others even to hear what I asked them to do even when others are answering or asking question not all get what was said."*

Interpretation: Both students and lecturers from the finding agreed that students should take a role in their learning process. The findings further show that high numbers of students per lecture deprive effective teaching and learning and also hinders an opportunity of building good relationships for both lecturers and students. All participants concluded that high numbers per class cost students their academic contribution that leads to poor academic performance.

From the findings the students were also encouraged to be problem solvers by preparing themselves before classes and consulting with their lecturers when they

encounter problems. Both participants said that academic results can be obtained only if classes can be divided and be made smaller in number per class, to enable effective interaction during teaching and learning. In support of the responses above Pule (2015:90) argue that close contact is central to students' learning.

Sub-theme 3.2: Group work and academic performance

Students' responses:

Student participants pointed out that it would be for their benefit if lecturers can divide them in smaller groups and allow them to work with other students who have some understanding of the topic under study. They are of the view that it would be to their benefit if they could learn from high achieving students in their group. Students believe that if that type of arrangement can be implemented it will work for them. They feel that if they have group work they can continue with the work even after the formal classes. S16:C1: "*Lecturers should set us in smaller groups, those students with high marks then take leaderships. I believe in this way many students can be active and participate in every activity that is instructed by the lecturer in their spare time".*

Participants also indicated that well-formed groups for Accounting would encourage them to revise the topics that were covered in a class of which might have given them problems to understand. They reported that revisiting the topics that were done in class with their lecturer is to make more clarity on aspect which others did not grasp properly during the class. They pointed out that group discussion will simplify tough topics for them. S8:C2: *"Well organised group discussions to practice what has been covered in class on a daily basis, clarity can be made on parts that were not clear while we were in class."* Participants perceive working with others as the solution that would make them understand better. They indicated that being in groups would enable them to share ideas and resolve some issues with regards to problems they have encountered on specific topics. S3:C1: *"Group work would encourage me to engage in discussion and become better in understanding and sharing."*

Furthermore, students clearly specified that they believe that working in teams will solve their problem because wherever they might encounter difficulties they can refer that to others and resolve it together. Participants have confidence in partnerships.

They clearly say working together improves understanding. S4:C2: *"I think treating accounting in a group, with a partner or a friend can make our work easy because through discussion our problems will be solved."* In addition, students indicated that group work is a good platform for them to share information and give each other some strategies of dealing with or tackling certain aspects of Accounting. Therefore, they said they think every group member can benefit from the discussions. S24:C2: *"Group work help us to share knowledge with others about the subject."*

It is also mentioned that students' presentations enhanced memory and leads to better understanding of the content. Students asserted that if they could be given an opportunity to make presentations, i.e. to showcase their academic involvement and understanding on the topic or concepts that the group were responsible to work on, that would cause them to understand better. They believe that from there they will learn as there would be questions from the rest of the class, and be corrected on issues that they did not understand or present it the way it should be. S27:C1: *"I think group work is of great help if we are given chance to present what we have been discussing in order to see whether we are correct."*

Participants further mentioned that smaller groups can provide social support and encourage slow learners to believe in themselves and assist them on content that they did not understand. They further indicated that within the group it would be peer-to-peer instruction and that is how transferability of some skills is being built. Therefore, they perceive small groups as a tool that can promote students working together to exploit each other's learning. They further indicated that the group work reinforces skills that would be applicable collectively and individually. S18:C1: *"Some of us who do not understand quick can be supported by those who understood the lecturer and what is required, by so doing they are also sharing their skills with us in a group."* In addition, participants further stated that group work helps because it forces them to research before group discussions so that they can share with others. S25:C1: *"To do my work with others makes me to prepare before group discussion because during the group discussion I have to share what is allocated to me."*

Students would be able to retrieve the information that they have discussed with others. They indicated that it becomes easy for them to remember what they

contributed on and what other fellow students said. Participant feels that if groups can be well established through their lecturer's instructions, they can benefit a lot because they will have a portion to share and be able to benefit from others. S4:C1: *"What I noticed, I remember so many things that I have discussed in group so formal group works designed by the lecturer can be effective."* S20:C1: *"Within our group work others can assist me to approach questions differently in solving questions."*

Lecturers' responses

The lecturers' perspective is that students can learn better if they introduce group or team work among students. Lecturers are of the view that the introduction of dividing students in smalls working groups can instill rotational learning amongst students through the sharing of information. The group work impacts positively on students because in groups they are bold enough to call their lecturer and ask questions. Participants find group work to be a great platform for students to engage each other and their lecturers. Through group work they inspire each other. Lecturers are reporting positive attitudes of students within groups on their academic activities. L1: C1: "*I have noticed that putting students in groups of not more than five per group is very effective. What I have noticed they ask each other questions till they get to the answer but if they are still not happy they are so bold to call the lecturer to their group to explain. They even encourage each other to participate."*

In addition, participants emphasized that the smaller the groups the more students seem to interact freely and they seem very willing to assist one another. The fewer there are in a group the more relaxed and comfortable they are around each other. Participants further indicated that students within smaller groups learn to accept and tolerate each other's questions and share different ways of approaching topics. They seem to accommodate each other and extend a helping hand to those who are still experiencing challenges with regards to the topic under discussion. L2:C1: *"Contact seem very smooth when they are in small groups. They are even showing one another as to how some of the accounts being recorded."*

Although grouping is important, it is also necessary that students develop individual learning practices. Participants made it clear that groups are effective once individual students also prepared well in advance as to what is expected from each of them.

Participants indicated that each and every group member is expected to make a valuable contribution to others and further learn from others from their discussions. Therefore, one cannot just depend on the discussions but rather practice on their own before and after group work. Participants seemed to realise that if students did not prepare before group discussions, they may miss out valuable points that others are bringing up. L1:C2: *"Group members still needs to work individually and come to groups to discuss their problems. It would be better to do it individual first and come to groups with some problems.*"

Participants asserted that exposing students to smaller groups of few students per group talking a similar language, could be of assistance to those who sometimes find it difficult to follow the language used by the lecturer. Participants believe it is advisable to use any method of lecturing in order to help others. They introduce the "buddy-system" whereby peers using a similar language could assist and support each other to understand the content. They also indicated that sometimes it works for some of them if they formulate mono-lingual type of groups that are formed specifically for those who can assist with the language, where language seems to be hindering their understanding. L3:C1 stated that: "*Having smaller groups, students can learn from one another. By putting them in smaller groups they can understand each other as they can even be able to explain to one another in Sotho to those who do not understand the lecturer in English."*

Other lecturers are of the opinion that students from their small groups can be given a chance to make presentations. They said presentations would serve as a recall process, not only to presenting students but also to participating students. This method is ideal to a large group because all will be exposed to the preparation of the content and making representations. Participant further indicated that students' presentation might take a long time and work covered might not be much because there would be so many groups. They said it could happen that the syllabus may not be covered. This particular lecturer indicated that the small group and presentations do work. But that lecturer was not prepared to share further information with the researcher. When the researcher was trying to make a follow-up question on that, the participant was really not prepared to go further than what is stipulated below. L1:C2 asserted that: "*The other way could be to allow students to make presentations. Presentations would be*

another way of letting students to learn by presenting what they have learned from their small groups. There are no other best way of learning and understanding unless you present to other people. But sometimes it takes long, I know it works but we stay far behind syllabus if we could focus on student's group presentations."

Interpretation: Lecturers and students both have the perception that group work can work because that would allow students to take part in their learning, as they would have a chance to engage with other students, strengthen knowledge, team spirit and freedom of expression, and also learn from each other. Both students and lecturers are of the view that the group work approach can develop a very strong communication amongst students, encourage active learning and through small group work students can develop critical thinking skills and become good decision makers. Group work and academic performance is supported by Pang, Mugno, Xue, Wang, (2015:34), who confirm that students learn better if they assist each other through group discussions. They further indicated that those with advanced learning skills can assist those who possess less advanced or lower learning skills. However, intergroup learning should be geared towards development of independent learning. The lecturer's task here is to provide students with useful, engaging, and relevant tasks to accomplish set objectives of the lesson.

The above findings also concur with Vygotsky's social constructivism theory as discussed (See 2.3.1.1) which provides an explanation to the above assertions by maintaining that knowledge is not built by individual learners, but broader social context which is limited to the learners' environment (Mogashoa, 2014:52). Also Schreiber and Valle (2013:2) asserted that learning is a social and collaborative activity where people create meaning through their interactions with one another. The data collected from all interviews and majority of written responses suggested the use of group work in first-year Accounting classes.

This deduction is supported by Mckinnery and Heyl (2008:76), who assert that peer-to-peer interaction promotes constructivist practices because there would be flow of engagement where decisions are made after debate and sharing of ideas. Consequently, lecturers are of the opinion that dividing students in smaller groups could be a solution to high failure rate. However, lecturers still have reservations in

terms of how that strategy can work, considering the number of students per class. Other lecturers are of the view that considering big class sizes, they need to do more examples with students and encourage students to practice every day after classes.

Sub-theme 3.3: Engaging learning and academic performance

Students' responses:

Majority of students believe in taking part in class activities as something that would give them the upper hand in understanding and performing better. They also reported that if they can cover more than what was done in class on their own, it would improve the way they perceive Accounting. S23:C1: "*Be involved in any discussion that will take place in class and do more excises on my own about what lecturer has done in class, will help me to perform better in Accounting and there is no doubt I think I will pass if I can continuously practice every day after class."*

Students indicated that communication amongst themselves and the arguments they make increase their knowledge because they get more ideas from others. They specified that valuable information comes out of the debated issues and from there some interpretations are shared on concepts which others did not understand before. They further indicated that if their arguments are not resolved amongst themselves they normally escalate it to lecturers from where they get more clarity. That is how S5:C1 put it: *"Through group discussion we interact a lot, we debate about issues, if we do not understand we take it further to the lecturer."* In addition, some students emphasized and reiterated the importance of partnerships when dealing with Accounting. They confirmed that due to the difficult nature of Accounting, one needs others to assist in resolving challenging issues and that they believe it can improve their academic performance. S9: C2: *"Accounting is a very tricky subject it needs us to work together in order to overcome its trickiness and to pass it."*

Students confirmed that working with others forces them to conduct research before discussions. They indicated that working collaboratively with others forces them to go the extra mile to get relevant information so that they are able to support their arguments during the discussions. S28:C1 *"Before getting to the correct answer there are lot of arguments and that encourages us to ask around before meeting as a group."*

In addition, student participants asserted that they normally focus and pay attention more on information sharing and very importantly, engage each other to get the essence of the topic under discussion. They also indicated through the engagement with others that they become interested in Accounting because now there are aspects that they understand and they are even able to reason out how things are and should be done. S11:C2: *"Sharing of information and explanation of questions amongst ourselves and elaborating what questions require from us, lead to the gaining of interest in accounting."*

To echo the benefits of engagement of others to gain more knowledge and understanding. Student participants emphasized the importance of interacting with their lecturers on issues that they need clarity on and that makes them gain an understanding and become successful, as they believe they have received correct information from their specific questions. S24:C1:"*Engaging lecturer with questions where I do not understand*."

Student participants indicated that it is an opportunity for them to do an assignment with others because from there they learn how recoding is done. They emphasized that it is critical to know the applications and that it becomes easier when sometimes given an assignment and do it together. They reported that is when they learn how things are done. S30:C1: *"Working together with others on assignments activities also are helpful because we get to learn from other students."* In addition, student participants asserted that for proper learning and understanding to take place it requires more of their commitment, and not to expect others to simplify things for them. S19:C2: *"To be fully committed to my studies, asking as much help as I can and associate with people in the same field more."*

The same sentiments are shared by other students who strongly believe that persistence, discipline and dedication with their studies will eventually pay off. They believe in the saying that practice makes perfect. They reported that practicing several times will improve their academic performance. S10:C1: *"In order for me to succeed academically in accounting field, I must definitely practice every single day and test myself if I am on the right path, because accounting is a significant field engage myself*

and talk to others about accounting related issues. I must not take accounting for granted."

Lecturers' responses:

One lecturer has indicated that during the introduction of the topic students become disconnected from the whole discussion because the lecturer is the only one talking and students are not fully engaged or making some contribution at that stage and get bored. The lecturer further indicated that students enjoy illustrative type of explanations, whereby they can also take part in the process of learning. Therefore, the participant highlighted that interactive approaches are the best strategies that are working to ensure that everyone is at least following the topic of the day. It was further pointed out that students need to be included throughout the process of the introduction of the new topic under discussion for the day because that would help them to understand and take part in their learning. L5:C2 states that: "*I have noticed that we lose students during the introduction of a topic. As I am the one explaining they are not doing anything they are not fully engaged. I can see that introduction bores them because they need to be engaged. I normally asked them some questions because they like illustrative type of explanation where they can also take part and be involved.*"

Some lecturers expressed their concerns that students do not fully honour their academic work and are also not adhering to the few tutorials established for their gain. Participants indicated that Accounting for first-years places emphasis more on the fundamental principles and practices of Accounting, therefore students need to practice every day in order to master processes and procedures of the basics of Accounting. Participants further indicated that it would be advisable for students to work through previous tests and examination questions in order to get more exposure on different types of questions that are asked in Accounting. They indicated that through practice students will develop some skills of overcoming their Accounting challenges. They asserted that Accounting cannot be treated like plain theory subjects where they can read and absorb the information with ease. Participants affirm that if practice is really taking place and done well, majority of students can pass; unlike currently when few are progressing and the majority are not successful. Accounting requires more self-study. L3:C1: "*Accounting is a practical subject if a student does*

not work through questions every day is a recipe for disaster because accounting is like Mathematics need to be practiced all the time. Practice makes perfect. They cannot treat accounting like a subject that they will read at the later stage. Accounting seek more of self-study and a lot of practice." Participants further indicated that students are not fully engaged with their studies because they are not even doing their assignments effectively. Participants indicated that if they practice they will be able to understand the subject matter. L2:C1: *"Our students do not do their assignments of which would give them the chance of engaging with the subject, without proper practicing they will not understand accounting."*

Interpretation: Students' involvement and participation are seen as key to solving the problem of high failure rate in Accounting. This sentiment is echoed by both the lecturers and students as indicated in the previous reporting portions of this study, that if participative approach can be followed and students are encouraged to practice and come to classes prepared, also effective interaction amongst students, would improve their academic performance. The responses of all participants as cited above concur with the findings of Omodara, Kolawole and Oluwatoyo (2013: 209) that posits that students' participation and interaction with others in class and taking part in their studies, has a positive significance in academic performance.

The collected data also showed a similar aspect as in Chapter 2 (section 2.6.1.1), that peer-to-peer learning empowers students to apply knowledge through engagement and practice in a well setup environment (McKinney & Heyl, 2008:179). It is therefore proper to conclude that students' success depends entirely on a lot of practice as Accounting cannot just be memorized. For example, it would be impossible to memorize debits and credits of transactions where students need to reason the transactions out and practice the recording of transactions and calculations. The emphasis here is that students should be encouraged, guided, coached and supervised during their interaction with each other and with the lecturer in class.

5.4.4 Theme 4: Barriers to academic performance

Sub-theme 4.1: Language barriers

Students' responses:

The majority of students disregard the relationship between the academic language used at the university and their poor performance in first-year Accounting. These students made it clear that English as a language of instruction does not pose any challenge in their academic performance even though it is not their first language. They further indicated that being taught in English makes them more knowledgeable. S21:C1 emphasised that: "*English does not affect my performance at all. I actually learn more when I am instructed in English."*

To strengthen the case that language is not in any way a contributing factor on students' poor academic performance, S23:C2 pointed out that, from basic education they have been taught in English and therefore they are comfortable with the language. They asserted that they do not find it challenging in any way, and their scholastics achievements are not disrupted. *"I have been using English as the language of instruction for all my subjects since primary school so it doesn't affect my academic performance."* Participants also indicated that, the way they view Accounting is the subject demands more than only the skill of being linguistically inclined. They view the subject to be pitched at a high level for their understanding. They felt that the subject is designed in such a way that not everybody can pass Accounting. S6:C1: "*It is not about the language per se but it is about the subject itself. I do not think it meant to be passed*."

On the other hand, some of the student participants indicated that English as a language of instruction at the university is a challenging factor for them. They confirmed that they do experience problems with English as language of learning. They divulged that because of being confused by Accounting terms they often fail to understand what questions required. Participants confirmed that the understanding of English as an academic instruction would play a major role in their academic performance. However not being sure of some of the Accounting terms leads to misunderstanding of the questions and its requirements. S26:C1: *"I come across*

challenging accounting terminologies which by that time I am not holding dictionary, its then I might say that I am not understanding what is said I must do in the question. So understanding English is important." In addition, other participants indicated that due to some of the Accounting key words that they do not grasp well or link them to the requirements, hampers their academic performance. They indicated that understanding of the subject key words plays a major role because one would be able to follow the instructions and know what is required. S17:C1: *"English as the language of instruction affects our academic performance in accounting in such a way that there are key words that we do not understand or know what is it is needed from students."*

Participants further said that they sometimes had difficulty in understanding the English used by their lecturers. They said it becomes very difficult for them to comprehend what their lecturers had said, they become confused by overbearing terms that they are sometimes confronted with. They said because of misunderstanding some of the words, their academic success is at stake. S32:C1: *"English as the language affects my academic performance in accounting because some of the other time they use bombastic words, so it makes me to be confused."* S21:C2 confirmed that as students they find it very difficult when unfamiliar terminologies and words are used. They find themselves struggling to handle the task accordingly as per requirements due to confusion. *"Sometimes one struggles to understand what she required us to do when given a task do, but it does contribute to the things that affect the academic performance of most students."* Some participants confirmed that misunderstanding of the instruction or not understanding the question is often influenced by limited English vocabulary. That is how S24:C2 put it: *"Difficult in understanding instruction due to limited vocabulary."*

A small number of participants reported that the adoption of the language of instruction at the university from their previous languages of learning at high schools, posed a challenge to their academic performance. They indicated that from their high school days they were doing Accounting in their own languages. Participants asserted that language used at the university which is different to the one used at high schools, contributed towards unsatisfactory academic performance. This is how student S13: C2 puts it: "*English as the language of instruction affected me a lot because I had to adopt from having done accounting in Afrikaans at high school to doing it in English*

so I could say it contributed to my failure, because sometimes I didn't understand some terminology used." In addition, some said they found it very challenging when they first started at university and being lectured in English after high school, where everything was explained in a known language. They said being at university and being introduced to English was not an easy adjustment. However, they confirmed that doing everything in English at university is the way to go because they become more educated. S18:C2: *"It was difficulty at first because I come from those rural schools and they used to teach us everything in Sotho so being taught in English come as a surprise but it's good because it makes us get more knowledge."*

Participants further confirmed that their struggle to progress is because their background did not afford them an opportunity to learn a second language. They also indicated that they find it difficult to follow the instructions. S6:C2: *"It affects us in a big way as most learners do not come from English schools, sometimes they struggle to take instructions as they misunderstanding."* Others said it is even difficult to ask questions to their lecturers because they are not confident and feel that they are not conversant enough to engage with others. S4:C2: *"I think sometimes we have problem to understand English that we cannot even ask our lecturers."*

Student participants asserted that they sometime cannot comprehend some English words. They realised that, the cause could be that the language used at the university is a second language to them. For them to follow the content of the subject they said they have to translate to their home languages after which they will get the meaning of whatever was not clear. S18:C1: *"Because English is not my mother tongue so there are some words that I can't understand if only I was thought by my language first."* Participants also revealed that their challenges in comprehending some of the English words is because they are not used to communicating in English. They claim that English to them is the second or even third language. That is why sometimes they misunderstand what is required and end up giving incorrect responses that results in failing. S11:C2: "*English is not easy especially to some of us whom is not our home language. This means that some questions are misunderstood and therefore results in failure."*

The above sentiment was supported by S8:C1 who pointed out that, English to some of them is difficult because it is not the language that they use regularly. They confirm that they become withdrawn in classes, unlike those students who can speak English fluently, understand and follow the instructions once given while the others are struggling. *"English is not the language that most of us use at home. I become more quite in class. For some of us it is very difficult to understand the language, even when task is given we do not start the work fast like those who understood the instruction at first."*

Some students indicated that they are afraid or shy to participate in class because they cannot express themselves in English. They said they are afraid because they do not know how to put their points across. They asserted that they are always doubting their interaction abilities and they tend to be reluctant to answer questions in class or just speak in class because they feel their contribution would be judged. S23:C1: *"Lack self-confidence in speaking in class."* Other participants also indicated that they hate classes where they have to do oral presentations. They hate talking in front of others. S16:C2: *"I do not often participates because I do not want to speak in front of the class."* In addition, other participants made it clear that they are not participating in class because they have low self-esteem and lack self-confidence on their communication skills. S3:C2: *"I am not confident of my communication skills so I do not ask anything in class."*

Lecturers' responses:

The opinions emanating from lecturers are that students do not understand Accounting terminology and practice because they do not have a good foundation in English as a medium of instruction. Participants indicated that limited knowledge of English hampers the clear understanding and good interpretation of the core of the subject. They further mentioned that due to the complexity of the Accounting concepts some students find it difficult to grasp as they are not well grounded with the academic language. They indicated that language limitations hamper students' progress. L2:C2: "*Language to our students is a problem to follow all instructions made in English to make sense because some of the accounting concepts and interpretation are very difficult for them.*" Participants also mentioned that students get Accounting transactions wrong because they sometimes misunderstand certain requirements. Therefore, necessary English proficiency impacts negatively on their studies. L1:C1:

"*English as a barrier makes students misunderstand the transactions and the instructions.*

In addition, lecturer participants mentioned that the university has introduced a pre-English course to overcome students' hurdle towards following instructions and understanding of what is required of them. However, they said the very intervention does not seem like it has much impact because students seem to still be struggling even though they are or have been attending the pre-English course. L3:C1: *"We have the bridging course for English, so called Pre-English for the first year, but still English language is still a problem to our students because it put our students at a disadvantage. From the same intervention they do not seem to become better in academic language.*"

Interpretation: Both lecturers and student participants for the study indicated that Accounting terminology and key words used at times present confusion to students. Furthermore, it is added that students seem to perform badly during tests and exams as lecturers sometimes use new terms that students are not familiar with. Misunderstanding certain terminologies in Accounting hampers correct interpretation of what is expected of students. However, to some extent, students seem to understand Accounting concepts when explained by peers rather than lecturers. This could be caused by the different level of English presentations by both lecturers and student peers serving the position of SI leaders who might mix English with vernacular for better conceptualisation of the subject content.

Within the South African higher academic spheres English language seems to be a dominating language as a medium of instruction. The majority of South African students are using other official languages from home, even from high schools, other than English (see section 2.9.1). Lack of efficiency in English language is considered to be a high contributing factor towards poor academic performance (Van Zyl-Schalekamp & Mthombeni, 2015:32). It is clear that students need to be proficient in English language before they grasp the content of the subject. Therefore, for students to master the Accounting subject such students need to master the terminology of the subject (Baumann & Graves, 2010:6). Based on the findings of this study majority of students do not see English in any way contributing towards their academic

performance. The deductions of this study from students' perspective are supported by Hartnett, Römcke, and Yap (2004: 12) who found that English language does not make any discernible difference between English as first language students and those with English as a second or third language. This deduction is partially supported by Joubert (2010:45) when indicating that English may influence students' academic performance to a certain level. On the other hand, Pule (2015:65) is of the opinion that that using student's second or third language as a medium of instruction is a barrier to success in Accounting 1 due to terminology usage of the course.

Some students confirmed that they were not often exposed to English as a medium of instruction at their previous schools and home background. Therefore, they confirmed the challenges that English language posed towards their academic education. Lecturers on the other hand are convinced that first-year students have a serious problem with the English as an academic language. The sentiments of some students and lecturers are echoed by Steenkamp *et al*. (2009:118) who confirmed that in their studies students' language proficiency seem to be the determining factor in Accounting 1. They further indicated that if students do not understand the key words due to language inefficiency and lack of language vocabulary, it would be difficult for them to perform well.

In the institution for which this study is undertaken, students are advised to first start with the so-called bridging course in English language, intended to increase the level of comprehension and writing in the language in the first year of study. This intervention strategy could have positive results when taken seriously and with intention. This strategy at no stage could place students at any disadvantage but is a building block for future success. It is introduced simply because some prospective students could not do well in pre-test English language designed by the university and is also a condition for university access and final acceptance.

Sub-theme 4.2: Mathematical barriers

Students' responses:

A great number of student participants indicated that the knowledge of Mathematics does not have any impact on Accounting performance. The participants viewed

Mathematics and Accounting as two different disciplines. They asserted that according to their view, knowledge of Mathematics will not influence the holistic knowledge, understanding and performance of Accounting in any way because they are from different disciplines, even though there is a bit of Mathematics in Accounting. Participants also indicated that the background of Mathematics' knowledge they have does not play any role on the performance of first year Accounting. S28:C1: "*My mathematical background has no effect in my performance towards accounting. According to me accounting and mathematics are two different things. Knowing mathematics cannot lead to a pure understanding of accounting.*"

In addition, student participants indicated that the only mathematics required for Accounting are very basic skills, such as adding, deducting, dividing, multiplying and equation skills. Participants reiterated that due to the basics of Mathematics required in first-year Accounting, they are of the view that the knowledge of pure Mathematics does not have much influence on Accounting performance. Mathematics only assists as a guide in calculations. S20:C2: *"I do not think at all that pure mathematical background has influence in accounting. In my opinion, I don't think mathematics has that much influence in accounting except for additions and subtractions and etc., of which are the basics that everyone poses."*

Student participants further indicated that some of them did not do Mathematics at high school. Nevertheless, they confirmed that their Accounting performance from high school was good. Student participants indicated clearly that according to them Mathematics does not have any impact. They concluded that the necessity is only for them to find ways of understanding the Accounting content and finding the strategies of making accounting simpler. S24:C1: "*I haven't done mathematics but I was performing well to accounting from high school. I think understanding of the content of the work is an issue.*"

Very few student participants indicated that a background in Mathematics has an influence on Accounting performance. They indicated that the early foundation of Mathematics' skills is necessary to attain high academic performance because the basic knowledge enables them to deal with the mathematical aspect of Accounting. Participants indicated that the background knowledge of Mathematics enables them

to answer some of the Accounting questions because they are influenced by certain Mathematical rules and procedures. S21:C1: *"Mathematics has influenced my performance because I am able to solve the numerical problems in our tests mostly with just applying basic mathematical laws."*

The same sentiments are shared by other participants who indicated that in Accounting some questions require a bit of mathematical background, so they find the knowledge of mathematics playing a role in their success. They confirmed that understanding Accounting was influenced by a bit of mathematical background. S12:C2: "*Some formulas would require you to apply your mathematical knowledge in order to understand."*

In addition, participants asserted that their ability of being able to calculate fast was the result of a mathematical background. They indicated that the knowledge they acquired from Mathematics at an early stage of their education enables them to be accurate in Accounting. They further claim that the knowledge of Mathematics is to their benefit because it improves their speed in handling the Accounting transactions. S19:C1: "*Ke kgona ho calculate as quickly as possible and correctly, I have learnt to calculate the time I was doing maths."*

Lecturers' responses:

Some lecturers indicated that they do not see any relationship between background knowledge of Mathematics for first-year Accounting students. They indicated that according to their knowledge of the subject as lecturers there is not much mathematical knowledge required for one to be successful in first-year Accounting. They further said Accounting needs only basic calculations and nothing much. L1:C2: *"I do not think students' needs maths. I do not think so, I do not think they need maths in Accounting 1 because we just do basic calculations and subtractions. I do not think they need any background of mathematics."*

Other lecturer participants are of the view that a mathematical background for first-year Accounting students is necessary for the best results in Accounting. They indicated that if students have a mathematical background it is easy for them to undertake any challenging Accounting tasks. They stated that students with a

mathematical background mostly give precise answers. They further indicated that arithmetical literacy is sufficient for Accounting but at least one needs to have some basic mathematical background. They confirmed that there is no need of sophisticated understanding or knowledge of mathematical reasoning, they just need the regular engagement in solving those basic Accounting tasks. L2:C1: *"Maths is necessary in order for them to engage in reasoning out their accounting answers. Arithmetic literacy as basics of mathematics can really assist our students to be able to work out answers correctly*."

Participants also indicated that students with a mathematical background seem to be capable of handling Accounting tasks with ease. They also asserted that it enables students to think logically and that those students are deeper thinkers. However, they made it clear that they are referring to students who have undertaken pure Mathematics as logical thinkers, not mathematical literacy. They still maintain that Mathematics plays a major role in that students understand quicker. Overall they said that students with a mathematical background stand a better chance intellectually and have the ability to understand. L1:C1: *"Students with mathematics background are able. They think deeper and have an analytical analysis they turn to be more logically. I refer to student who have done pure mathematics not maths literacy. They stand a good chance of even understanding quicker than a person without mathematical background."*

In addition, participants support the notion that first-year students need some mathematics experience as basis on Accounting transactions and adjustments that need to be calculated using different formulas and percentages. Participants claimed the students with a good background of Mathematics are in a better position to do well in Accounting because of their background in figures and calculations strategies. Participants further indicated that students with a good pass in matric are better off in Accounting. Lecturer L3:C1: *"I think accounting for first year students have to get a certain level of mathematics, because in accounting they work with numbers. Students with high marks in mathematics from high school can do better in Accounting. Students who do not have mathematics do experience calculation problems."*

Participants claimed that, students who are mathematically inclined are better off in calculations and reasoning skills, they also seem to have accurate answers as to why they are apportioning any figure to a specific account. Participants further indicated that students with a mathematical background are good with making correct accounting interpretations and are also able to give accurate meaning to the task that they are dealing with. L2:C2: *"Mathematical background enable students to become more accurate in their calculations and they reason out why they have calculated that answer that way, of which is the reason and interpretation needed in accounting. They can analyse the information and give meaning."*

Interpretation: Majority of students and certain lecturers reported that they do not see how Mathematics can be a contributing factor towards Accounting first-year performance because even some who have not done Mathematics at high school did perform well. The sentiments are shared by Onuoha (2014:76), whose research results confirmed that there is no significant relationship between Mathematics and Accounting performance. According to Onuoha, students only need to be encouraged to concentrate and focus in order to cope and become successful. Apart from those students and lecturers who do not see any influence of Mathematics, there are some students and other lecturers who still maintain that mathematics influences their way of calculations and students' decision making in answering questions.

The above response is supported by Papageorgiou and Halabi (2014:14) who claim that due to high levels of logic and skill required in Mathematics, students who did Mathematics post university level are bound to perform better in Accounting. Lecturers confirmed that through their practical experience they agreed with this. This is also the reason that some students believe that they derive more critical thinking from the previous knowledge of Mathematics. Researchers such as Pule (2015: 89) and Joubert (2010:174) echoed the same sentiments with students and lecturers who asserted that mathematics has an impact on first- year accounting performance. Both Pule and Joubert in their studies conducted in South Africa found a significant relationship between high school Mathematics and first-year Accounting performance. Some students are of the opinion that a mathematical background has an effect on their Accounting performance and helps them to calculate quicker on unfamiliar amounts with ease.

It is clear that based on the reported responses above, Mathematics is a significant factor in Accounting performance at the first year of study. This statement is further supported by the literature where Papageorgiou and Halabi (2014:14) confirm that no matter which level of Accounting, a mathematical background is significant in order for students to perform better. Consequently, it is concluded that a mathematical background is necessary for better results, before any student enrols for Accounting.

In agreement Pule (2015:29) contented that Accounting needs at least a basic Mathematics background as a pre-requisite for an individual to be admitted in the Accounting programme. According to Yunker, Yunker and Krull (2009:2), Mathematics has been singled out as a determinant success factor in Accounting. Joubert (2010:45) indicates that students find it very difficult in first-year Accounting due to lack of mathematical skills needed for basic calculations.

Sub-theme 4.3: Financial barriers

Students' responses:

A significant number of students who participated in this study stated that they are generally in dire need of finances for their studies. Their inability to pay for tuition and the emotional stress accompanying such financial need seems to have an influence on their academic performance. Some indicated that stress they experience with regard to their finances exceeds by far any stress levels they experienced at school. S10:C2 confirmed by stating: "*Many students come to varsity burdened by financial strains inherited from home and that the thought of being academically excluded because of financial status causes a lot of stress on the students. I for one am one of the them and my plea is that the government should address this and let me conclude by saying that when a child is at school, all they need to worry about is their books and nothing else, that will guarantee a pass at the end.*"

Some students feel the fees are exorbitant because the course has been structured as semester modules, which means they must register for two modules during the year. Therefore, they reported that the amounts that they are paying are too much. Furthermore, they claim that extreme registrations in a year costs them a fortune. They

indicated that even though they were made to register twice in a year, their financial limitations are not taken into consideration by the institutions. They claim that they are from families whereby nobody is working. They appeal to the management of the institution to revisits twice registration in order for them to be catered for. This is how S34:C1 commented: *"I feel that we as Accounting students National Higher Certificate: Accountancy (NHC) are robbed daylight because we register twice per year (R 5780.85 x 2) yet we are from poor families even our parents are not working and I request the management of the institution to review that and change it to once a year like every other course within this institution."*

Some of the student participants reported that they are aware that the funding that they receive in the form of a loan from the National Student Financial Aid Scheme (NSFAS), is not sufficient. From the little that they receive, many of them have to support their family members. Quite a few of them have indicated that they form part of child headed households and thus have to use NSFAS funding to assist their siblings at home. S13:C1: "*I look after my siblings as we do not have anybody whatever I get from NSFAS I share with them*."

To confirm that, they indicated that instead of using the money for themselves as students they save it for their siblings. They confirm that they make sure that with that money they buy groceries for their siblings because they are the only ones looking after each other. S21:C1: "Instate *of fulfilling the academic demands with the money I receive from NSFAS I always make sure at least my sister have grocery that she will eat before going to school, in the process sometimes I do not even eat during the course of the day, so financially I am struggling and also looking after my sister."* Additionally, participants further claim that the scheme pays late in the year towards the academic funding and they are therefore forced to look elsewhere to get money for registration, buying of books and for transport purposes. The following verbatim code describes how some of the participants feel about the NFSAS funding: S7:C1: *"I believe as first year students whom are funded by NSFAS are the ones who struggle most, because the allowance comes very late of the year, whereby we can't even have a fair chance to practice for formal test as we buy books very late after we receive the money and we also share the money with our family members, I have to buy food for everybody at home once I get the money from NSFAS."*

The other challenge to the majority of students is the availability of money for them to buy books in time for the preparation of the assessments. Students may attend class throughout the first term without a text book. Some may even write the first assessment not having a textbook thereby causing them to perform poorly. S6:C2: "*I do not have enough money to buy an Accounting book. It is very expensive. So I don't have any books. So I couldn't do my homework and sometimes got chased out for not having done my homework."*

S24:C1 concurred with the above codes that financial constraints deprive them of purchasing some of the academic resources with specific reference to textbooks. They further indicated that majority of them are from poverty line family backgrounds, so affordability of any of the academic resources becomes a challenge. Therefore, the solution that they could suggest is for their lecturers to supply them with copies of the textbooks. They are of the view that that if they can get that support from their departmental authorities their morale towards the subject would be amplified. *"Lecturer and department must have humanity for haven sake. There are lot of students who are poor and have no textbooks so in that case lecturers must try to make copies or lend them books to students because I also experienced that and decrease morale towards my module."*

Students generally reported that financial constraints impacted negatively on their daily travelling to campus. They indicated that sometimes it becomes tough for their families to support them financially. Therefore, for some of them it is difficult to get to campus without transport fare. *S29:C1* confirmed the report by saying: *"I sometimes do not have taxi fare so I do not attend class*." Students claim that due to the distance between their homes and campus it becomes difficult for them to walk to school. S12:C1: *"Unable to get money for transport as I reside far from campus and walking to campus is impossible."* Some students reported that they depend solely on their grandparents' old age grant for transport to school and food. S4:C2: "*If my grandmother's grand is depleted it is problematic for me to get to school, I need money to get to school every day."* They further indicated that the money is minimal to cater for all family needs. S31:C1: *"My grannies money is not enough for my transport sometimes I have to walk to school."*

Lecturers' responses:

Participants asserted that a financial problem is still an obstacle to most of the students in South African universities. Students cannot continue with their studies due to the lack of financial support from the state or family members due to the unemployment and poverty. Participants indicated that students wait for a long time to get financial assistance before they can attend classes, almost at the end of the first term because of the late registration and this affects their academic performance. L2:C2: *"The issue of financial constrains prolonged first term registration to the second month of the academic year. Late registrations due to financial problems also pose a challenge to students as they only attend classes upon registration. It looks like they are looking for the money elsewhere for registration till the end of the first month. In the meantime the classes are continuing."*

Participants also indicated that students do their registration very late and they are not allowed to attend classes unless they have registered. The late registration by students means they attend the classes very late and tests for the first term are already being written. This results in them failing the tests. L2:C2: "*Late registration due to financial constraints, students come to class while we are already writing test 1 and that on its own makes them to fail because they missed a lot of content they cannot just write a test on something that they did not know."*

Lecturers mostly commented on students attending classes without textbooks. L1:C2 highlighted that students' academic performance depends on availability of academic resources. Therefore, if students attend classes without textbooks it creates a challenge of not fulfilling what is expected of them. Further they commented that even the students who receive money from NSFAS are struggling most of the year as they get the money very late in the year. Lecturers confirm that when asked as to why they do not have books, they (students) claim that they do not have money. *"We are in the second quarter of the first semester but our students still do not have text books. That imposes challenges to us as lecturers and to them, because they cannot do their homework's and even make preparation before class. Even the ones who receive NFSAS get that money very late in the year. Teaching and learning is very impossible without textbooks. Majority of them do not have textbooks. They say they do not have money to buy textbooks."*

Listed here are the lecturers' remarks with regards to poverty which influences academic performance: Lecturers mentioned that due to poverty around the area where the institution is situated, their students are financially crippled. They commented that sometimes none of a student's family members are working, on the other hand there are no firms where they could be employed, considering there aren't many firms in the area. They stressed the point that financially students are struggling. They pointed out that sometimes they come very late for classes because they had to walk to the university as they could not afford transport fares. Therefore, due to walking they come to classes late, this also impacts negatively on their performance. That means they have missed some of the information sessions. They further pointed out that they arrive very tired and stressed, so they mentioned that learning could not be effective as it is anticipated to be. L2:C1: *"Poverty around our area plays a major role in our students' performance; financially from home they are suffering. Sometimes they do not have transport money and they have to walk they get here late if they manage to make it to the last portion of the morning classes. They get here very tired for the rest of the day."*

In addition, a number of lecturer participants reported that majority of their students attend classes on an empty stomach. They indicate these types of students are unfit to study because of rising poverty levels at their homes. Their concentration span drops due to hunger, as sometimes they did not have anything to eat for the day. They further indicated that what they have noticed is, even the funding that they get through institutional intervention does not go a long way because they have to share it with their siblings and also with parents if they still have parents. L1:C2: *"Coming to class hungry and there is no way that they would concentrate. The NSFAS money becomes the sources of finance for the whole family and they do not have enough for the academic activities."*

Lecturer participants indicated that students' home environment are not conducive for studying. They indicated that the basic needs of students are not always satisfied, therefore it becomes a challenge on their side to partake effectively in their academic performance. Lecturers further attested that if home resources for learning are not conducive it makes it difficult to perform well academically. They further indicated that

students cannot stay on campus in order to access the library facilities and other academic resources that they do not have at home because they have to travel back home in the afternoons. L3:C1: *"Their home environments are not conducive for studying; sometimes they do not have electricity, and no desks therefore that lead to poor performance. Again they cannot stay late on campus because they stay far from campus."*

Interpretation: Results from both interviews of the lecturers and students' written responses have established that cost of high education is abnormally high in South Africa. It could be that the direct or indirect costs both have negative consequences on students' academic needs. The amount of money indicated above in the quote affirms the fact that students who register twice in one academic calendar year bear the burden of financial stress. The payment as it is calculated and exhibited above is an illustration that it becomes a disturbing factor on students and parents who are mostly unemployed. Financial costs include the following among other costs: tuition fees, other indirect cost being costs for food, transport and text books.

Accounting students find themselves registering twice a year, unlike other programmes where they register once and are expected to pay the balance of the fees during the year. The researcher has established that Accounting students are supposed to register twice a year because they are doing module courses not year courses. It is evident that this exercise is costly on students who come from a poor background. The issue of late payments of National Students Financial Aid Scheme (NSFAS) grants is very thorny and it is also seen by lecturers who claim that this situation impacts negatively on students' academic performance. Added to the problem of NSFAS, lecturer participants are of the feeling that late registration (scheduled to the end of the second month of the academia) causes problems because students cannot attend lectures until formally registered. There are those students who come from socially unstable families, economically unorganised and poor families and these students supplement home necessities with the little NSFAS grants meant for university use.

It is common sense to conclude that lack of family stability hampers academic performance. Poverty is rampant especially in Black society and this situation is a

recipe for academic failure (Letseka & Breier, 2008:1). Similarly, the National Planning Commission (NPC, 2011:16) affirm that the academic success rate at the South African institutions of higher learning is still a race major determinant. It is clear that due to poverty, to certain races academic success is still a challenge.

It is clear that financial burden affect students in different ways, sometimes students do not attend classes because they do not have transport fares, they cannot afford educational resources, they find themselves in situation whereby they come to the campus hungry, because there is nothing for them to eat. With an empty stomach, students find it hard to do their assignments. Also home environment is not conducive enough for studying purposes due to lack of electricity, proper chairs, and desks for studying. According to Lacour and Tissington (2011:527) students who come from poverty situations do not perform well academically regardless of age and stage. These students fail to perform to the level of those who come from well-off families due to lack of certain academic resources and support. This also indicates that poverty restricts academic performance. Fakude (2012:48) also asserted that financial barriers cause interruptions on students' education and achievement.

In the same way, Muandu, Parsitau and Wambugu (2015:1361) point out that poverty, unemployment and social ills impact students' performance negatively. These ills and/or problems are daily experiences and are seen as causing instability in the homes.

Sub-theme 4.4: Students' prior knowledge and percentage obtained previously

Under this sub-theme only lecturers provided responses as there was no specific questions asked with regards to how previous knowledge impacted on students' academic performance.

Lecturers' responses:

Lecturers are of the opinion that prior Accounting knowledge is crucial for students to perform well academically during the first year at university. Prior knowledge and exposure into Accounting concepts and theories are a foundation for success and considered to be a bridging gap between high school and first-year content.

Participants further indicated that the content knowledge acquired previously becomes a building block when students enter university. L2:C1: *"You have to have a background of accounting because some of the topics covered at the first year requires the basic principles that one has learned from high school and move it up to the university level."*

In supporting the attainment of Accounting background as a leverage to study Accounting successfully, L3:C1 emphasised that it is crucial to have done Accounting in high school because it would be more difficult to understand Accounting vocabulary for the first time at university. However, they indicated that some students pass Accounting even though they never did it at school level. *"It would be a big jump if you have not done accounting in matric. If you have done it is a foundation for first year because at least one will be familiar with the accounting basic terms such as debit and credits and also being able to do the recording of the simple transactions."*

However, other lecturer participants raised their concern with regards to Accounting matric results. They said that they do not believe that Accounting results in Grade 12 are genuine because of the process of adjustment. They do not believe on the authenticity of the results percentage students obtained from matric, because from what they experience in classes does not justify the individual mark or percentage obtained from matric. They said students are not performing as they were expected to do in relation to their matric percentage. They said they were expecting first-year students to be able to manage the basics of Accounting but it appears they are still struggling to do that. L1:C2: *"I do not believe on the marks they got from matric. I think matric marks are adjusted, because if really a student got 50% at matric level, they can be able to do proper debiting and crediting in the first year*."

The participant further pointed out that even if students are given the same examination paper they wrote in the previous year, there is no guarantee that they will perform well in the same paper that they were confirmed competent on. To confirm the above statement, the participants showed an example of work that first-year students had written the previous year and they performed badly. Based on that, lecturer participants do not believe in the actual results that students obtained in matric. They also indicated that the reason students are not performing well in the first

year is because there does not appear to be any relation between what they have done and what they are doing currently. Also, they seem not to have any clue of what they have done previously. Participants indicated that previous year performance has no significance on the current performance because those students do not even know what they have done the previous year. L2:C2 asserted that: *"I gave one group of mine one question from their previous matric exam, they did not pass at all the same paper that they wrote in matric the previous year. So to me a previous mark obtained in matric does not have any impact in accounting performance at the first year."*

Interpretation: It is clear that prior knowledge gives students an upper-hand compared to the ones who do not know Accounting at all. The knowledge they have acquired in matric becomes the foundation to the first year content (see section 2.9.2). However, all participants voiced out that they are sceptical about the matric results. My interpretation is that they feel the students were given a certain percentage in order to pass. That is why they are not performing as expected in relation to their matric results. However, participants still maintained that prior knowledge and prior achievement are the variables in explaining first-year accounting performance. The above findings are supported by Bosua and Van der Nest (2015:25), they confirmed that Accounting performance depends mostly on students' prior knowledge and achievement. They further indicated that students who did not have Accounting at high school require more time and fundamental explanations of topics. Considering the responses given by some participants, previous percentage for Accounting does not have any impact on first-year performance; some students without Accounting experience enrol and perform well in Accounting even though they never had it before.

5.4.5 Theme 5: Academic interventions to improve academic performance

Sub-theme 5.1: Extra classes and presentations

Students' responses:

An overwhelming majority of students in both campuses endorsed extra classes as the main support intervention to improve performance. Students are of the opinion that introduction of extra classes would improve their academic performance. According to students' perspective on collaborative learning, additional lectures assist and equip

students to engage deeply in their work. Participants affirm that achievement could be attained through group interactions and discussions planned as part of the extra learning. They further indicated that if lecturers could be present during the extra classes, which would add more value because they could assist here and there where students got stuck during discussions. They further indicated that some students are withdrawn, therefore it would not be easy for them to be open up during the formal classes, but they could get a chance to engage others during the extra classes. Among the suggestions for extra classes students presented reasons and suggestions for extra classes as follows: S28:C1: "*To improve academic performance in accounting there should be extra classes for us every now and then, whereby students gets to help each other without, sometimes invitation of guest lecturers and being allowed to work own our own and lecture being there to assist here and there. Most students are shy to do anything in front of their own lecturer even to ask questions I think extra classes will enable students to ask their other fellow students.*"

In addition, participants pointed out that they feel the number of Accounting classes per week are just too few for them to grasp all the apportioned topics for the year. They further indicated that if they can be given an opportunity of being placed at accounting firms they would understand the content better than they do now. They indicated that getting exposure would give them more insight on the subject content. S6:C2 is of the opinion that: "*If they could allocate more time to the (increase) periods of accounting and give us practical for us to get experience (exposure), we might understand accounting better."*

Lecturers' responses:

Some lecturers do not agree with the extra classes because they argue that if students are not attending the other interventions that are already in place, such as SI, it would still be impossible for them to go for extra classes. They said if they do not honour other academic interventions, what would make them attend the extra classes? Lecturers were also adamant that the interventions that are already in place would be enough for students to excel, provided there is commitment and planning by students for their studies. Lecturers further indicated that based on their experiences, students are not attending the available interventions that are already in place for them, therefore they do not see how they will attend extra classes except that it will be

another expense on the institution. Lecturers indicated that their students are not taking their studies seriously. They mentioned that the unpreparedness of students might retard their progress and achievement in Accounting. Therefore, there is no necessity to incur further costs in terms of time and money. L2:C2: *" I do not see any necessity of extra classes because the type of students we have do not attend the interventions that are already in existence what would make them to attend extra classes except is another cost to the institution."*

On the contrary to the statements above, other lecturers support the notion of extra classes as they believe that extra classes could be a way of assisting students to improve their academic performance. They pointed out that appropriate extra lectures could assist students to gain knowledge they may have missed. Participants further indicated that if extra classes can be implemented they will have a chance to deal with issues that were not clear to their students. L1:C1: *"Extra classes can assist them to cover what was not understood in class and extra classes could be effectively used for group work and the lecturer can give him/herself more time to assist the struggling students."*

Interpretation: It is clear that students and lecturers find two classes per week insufficient time for students to grasp the subject content and to master the first year programme. From students' point of view, two classes per week are not enough for Accounting. This means that more Accounting lectures should be allocated where they go through previous question papers and revise the work that was covered in class.

It is common knowledge that repetition brings understanding. When a concept is repeated several times it becomes easier to conceptualize. It is during extra classes or so-called intervention strategies that students become familiar with content not comprehended in class. Additionally, those who missed lectures can recap on what they missed. Although the perceptions of other lecturer participants are that there is no good in the implementation of extra lectures, the argument for inclusion exceeds the negative view as stated earlier in this chapter.

From the students' responses it is clear that their perceptions concur with those of *Vygotsky's Zone of proximal development* as discussed in Chapter 2 (See 2.3.1.5).

This social constructivism maintains that social interaction directs students to learn from each other. In addition, students are adamant that if they can be placed at accounting firms for practical and exposure purposes, they are of the view that would improve their academic performance, because they will gain first-hand information.

Sub-theme 5.2: Intervention programmes

Students' responses:

Student participants only contributed on the SI as intervention programme when they addressed question two on their Questionnaire (see annexure E); there was not any question specifically for intervention programmes for students, only for lecturers.

Student participants indicated that from SI sessions they believe they will gain better habits of studying and becoming successful in Accounting. They confirmed that SI facilitators assist them in simplifying certain methods of dealing with problems. S14:C2: *"I thinking I can improve my results by attending SI sessions more often. Sometimes they advise us on study methods."*

Participants also indicated that their academic work will improve because in the SI classes they repeat the work covered from the formal class. Therefore, they anticipate that by attending the SI sessions their knowledge of the subject will improve. They indicated that SI sessions are providing insight into the challenging concepts that were not grasped clearly in class. Whatever was not clear from the session with the lecturer is clarified at the SI classes**.** S7:C2: *"Attend SI class to gain more knowledge of what was covered in class."* In addition, other participants indicated that SI sessions encourage dialogue amongst students. They indicated that they are given a platform to engage in meaningful conversations about the concepts. They further indicated that SI sessions allow them to interact relevant and helpful information to solve their challenging aspects in Accounting. S2:C1: *"SI sessions is a where a get chance to talk to my classmates about the concepts that we find difficult."*

On the other hand, overwhelming majority of student participants revealed that they did not want to attend SI classes because the SI facilitators did not know the subject matter/content, so they opted for not attending those classes. They saw no reason of

having those interventions because they feel that certain SI facilitators are unsure about the contents and they do not gain anything from those classes. They reported that sometimes they do not get information as they would expect to get from the SI, so they do not attend as they do not get appropriate assistance. S25:C1: *"I do not understand the way SI are doing things. If I have an assignment and ask them to help us they do not know, so there is no use to come to classroom to somebody who does not know."* Student participants also view SI facilitation as somewhat a waste of time. Student participants further recommended that management of the institutions should rather replace the SI facilitators (who are actually students) with people that are subject specialists. They reported that SI facilitators do not even check whether they have done the work that they were supposed to do as their assignment. They indicated that they do not find any valuable benefits from those organised type of interventions. They also pointed out that sometimes they do not receive answers to their questions and so to them it does not make any sense to attend. S10:C1: *"I cannot understand what SI are there for because they do not even check whether we have done our homework or not, when one asks them questions about the content they do not know."*

Lecturers' responses:

Lecturer participants reported that ever since they promised their students another chance of a test if they attend a certain percentage of their SI session, there is a good improvement of pass rate amongst students. They indicated that the benefits have worked for them in terms of improving students' performance. L1: C2: *"Since student introduced to SI and told that if they attend 50% of SI classes they will be give third test to improve their marks. Their marks have improved and number of failures is decreasing even though is not with the high number but there is a significance improvement."*

Participants indicated that ever since students were motivated by the provision of the third test, they can see a great improvement. They are experiencing more engagement by such students in class and they ask questions that were not clarified in the SI classes. Furthermore, lecturer participants indicated that they use the wellness centre which caters for students who need food and financial support. They pointed out that the interventions are helping and improving students' academic performance because students' basic needs are well-catered for at the wellness centre. L1:C1: *"They are*

improved on their study habits and engaging in classes. Wellness centres assist us also with needy students so we always refer them and they are always be given food parcels."

Participants indicated that the introduction of the bridging course equips students to be admitted to the main stream and assists them with their academic performance. The basics of the first-year Accounting content are covered and give students more opportunity to understand when they enrol for main stream. Participants further mentioned that at the present time the course is introduced at one campus and they are already reaping the fruits from the benefits of the course. L2:C2 asserts that: *"Bridging course for now has been introduced on one campus the roll-out to the other campus is next year. Students who does do not qualify to get into the main stream of NHC because of low M-score they state at the AAT (Association of Accounting Technicians) programme once they pass, they then accepted in the main stream."*

Interpretation: In this category students were more informed in their responses with regard to types of interventions. Consequently, students do not value those interventions much because to them SI classes are a waste of money to the institution. Conversely and contrariwise, other student participants ranked those SI intervention strategies as of great assistance. It is noted that various intervention strategies are in place in the particular institution where this study took place but students do not seem to be entirely interested in the institutional interventions. Therefore, students need to be encouraged to use the programmes and the benefits should be clearly indicated.

Lecturers emphasised the value of the intervention programmes such as SI, Mentorship, and Wellness centres programmes on campus, language proficiency classes where students are equipped on academic writing, bridging courses (See 3.6.2). All these programmes are meant to address the challenges of the risk subjects and at the first year of University for Academic Challenges. In order to encourage students to make use of the SI lectures, students are persuaded to attend SI lectures through various intrinsic and extrinsic rewards such as improving own marks in the planned summative assessment. One of the ways intervention strategies could improve academic performance is to introduce other corrective strategies such as bridging courses in addition to the programme of SI.

Bridging courses are normally attractive to students because they are credited. For example, Campus 2 has introduced the bridging gap to first year (See 3.6.2.2) in order to narrow the gap between the high school Accounting content and course demand at the university. Lecturer participants are of the opinion that this intervention strategy might work and improve the first-year results by the time students are due for the main stream. These interventions are discussed in Chapter 3 (See section 3.6.2). According to Rural Education Access Programme, (2010:12) the majority of institutions of higher learning around the world went an extra mile by putting in place these intervention programmes for students who are at risk of failure, with the aim of improving their academic performance.

5.5 CONCLUSION

This chapter presented the reporting, analysis, and interpretation of empirical findings from the open-ended questions (questionnaires) of first-year students who are repeating Accounting during the year of this study; and interviews conducted with respective lecturers at the University of Technology, Free State, with respect to poor academic performance of first-year students with specific reference to Accounting. The study examined the factors contributing towards poor performance in Accounting of the first-year students and solutions to minimise their recurring poor performance within the National Diploma in Accounting.

The researcher clarified how open-ended questions and transcript interviews were analysed. Through the empirical analysis four main themes emerged. The direct quotes from participants were used to prove the linkages between the themes and the findings. The discussion of the findings are discussed in the following chapter.

CHAPTER 6

DISCUSSION OF FINDINGS

6.2 INTRODUCTION

Data presentations, analysis and interpretations for this study are thoroughly deliberated in chapter 5 as per themes and sub-themes. Chapter 6 is dedicated to summarising the sub-themes under one theme. The following themes are discussed as per findings of study: Students' motivation, Adjustment to university life, Class environment and instructional approaches, Barriers to academic performance and Academic interventions to improve academic performance.

6.3 THEMES

6.3.1 Theme 1: Students' Motivation

It is obvious that student motivation at the institutions of higher education is an important issue. Students have different reasons of doing any specific programme with certain courses at the university; reasons that constitute the motivation for students to persistently enrol for a specific course like Accounting even though they encounter challenges with regards to the course. The interest developed by students on a course plays an important role on individual educational performance (Kiemer, Groschner, Pehmer & Seidel, 2015:94). Students' learning and acquiring of knowledge are mostly influenced by the level of motivation that an individual possesses. Successes or failures are critically influenced by the level of interest or passion one has towards the task and goals set.

The majority of students highlighted that there are opportunities presented to people with Accounting qualifications in the labour market. So students' cohort, who took part in this study are inspired to be in the Accounting field. However, there is a constant decrease of interest if there is a mismatch between students' needs and classroom practices (Kiermer *et al.,* 2015:94). More knowledge of Accounting concepts and principles are required from the lecturers in motivating students to work harder and

enjoy the subject more. But if students fail to perceive the relevance of content being discussed, this scenario automatically decreases passion to learn Accounting. However, good lecturing practices whereby students are engaged in a way of fostering a deep approach (Byrne *et al*. 2009:163), higher levels of success can be attained. The empirical findings here clearly indicate that students can understand Accounting better by being fully engaged through presentations and working in groups.

6.3.2 Theme 2: Adjustment to university life

Being accepted at the institution of higher learning students are exposed to the environment which they are not familiar with. There are a lot of issues that affect new students at university. These are the institution's culture, regulations, policies, structures which become unfamiliar environment. Compared to their previous experiences at school level, this situation overwhelms them. It is in this way that the complexity and hostility of the university environment affects students psychologically, socially and academically. Therefore, first year arrivals take time to socialise and acclimatise with the entire environment.

Lecturers generally put the blame on orientation that does not seem to be effective in accommodating all kinds of students, considering their different background. In addition, students themselves affirm that late registration affects them in a way that they are not sure whether they are allowed to attend lectures or not. Therefore, they miss nearly a month's lecturing. The effects of late attendance of lectures impact negatively on students and increase workload. Furthermore, students seem not to be fully prepared for the university workload as they always find the work heavier to shoulder compared to what they were accustomed to at school level.

At university level, students are not pressurised by either their parents or teachers who usually were there to see that they attended classes regularly and on time. Therefore, at university students are expected to manage and control their times for lectures and assessment. In other words, they are supposed to act like mature people. However, students are not exhibiting these characteristics of maturity.

Another problem that first-year students encounter is that they fail to comprehend and understand various subject codes, time-tables and venues. In other words, they eventually get lost and thus miss lectures. Sometimes linking course codes and venues becomes a challenge. By the time they get used to the time-tables and codes and linking with the venues most of the content work has been covered. Support is very critical to first-years, especially during the first weeks of the year to overcome new environmental challenges. Environmental support, proper orientation and academic support influences positive academic performance (DHET, 2011b:1).

6.3.3 Theme 3: Class environment and instructional approaches

Instructional approaches to students are regarded as an indispensable role played by the lecturer in every classroom environment. Lecturers are expected to create and maintain conducive learning environments that are ample in auditory and tactile and visual resources even on structures that are not conducive to learning (Arends & Kilcher, 2012:37). On the other hand, students are expected to take part in their learning through the guidance of the lecturers who are to provide their professional duties and knowledge, while applying different approaches considering the class environment.

The methods of teaching Accounting should provide students with necessary learning skills such as communication, quantity analysis, interpersonal and intellectual skills, especially at the first year of study. The transfer of knowledge can also be done by students themselves and through the knowledge they acquire from outside the classroom that would encourage them to think and reason logically. Therefore, students can be presented with the course material in a manner that coincides with their preferred style of learning. It is from this juncture that deep and constructive learning will result into students' satisfaction and educational achievement. Bristow *et al*. (2011:234) confirm the findings from this study that the matching of a lecturer's teaching style and course design can dramatically improve students' learning and performance.

6.3.4 Theme 4: Barriers to academic performance

It is notable that there are several barriers that hinder students' Accounting performance at the first year of study at a university of Technology. Responses from interviews and open-ended questions show that there are barriers caused by English language level, Mathematics background, and financial constraints. These problems were highlighted by both student and lecturer participants as factors contributing towards poor academic performance of the first-year students.

Participants' views concur with that of Macgregor (2007:1) who contended that South African universities of technology demand excessive amounts for students' registrations which make it difficult for those from a lower socioeconomic background to meet all university requirements. According Nnamani, Dikko and Kinda (2014:88) financial constraints often put pressure on students as they are incapable of attaining universities resources and therefore, this situation affects their commitment and ability to study (See 3.4.2).

It is for this reason that Nnamani *et al*., (2014:88) claim that students who come from a home environment where they do not know the source of the next funding do not normally perform well academically. These students are always under pressure because they are not sure of where they will get money for the next food and transport (See 3.4.3). In the same manner as indicated above, Dass-Brailsford (2005); Lourens and Smit (2003); and Bennett (2003) point out that even those students who got study grants share that money with their family members. Therefore, this amount of money is still not enough to meet their academic needs or requirements. It is for this reason that institutions of higher learning should intervene to accommodate students financially from poor backgrounds.

Another tool that can be used to break this academic barrier is the inclusion of bridging courses that institutions should introduce. The bridging courses can be used to link the knowledge acquired at school level with the new knowledge at university. In this way, the gap that exists between the knowledge at school level and university will close.

Literature consulted with regards to students' prior knowledge of Accounting and percentage obtained from the previous standard, maintained that prior knowledge and performance plays a major role in current students' academic performance (Garkaz *et al*. 2011:123). This is confirmed by the admission made by the university when students are admitted based on their scores. Therefore, the admission is also based on the notion that prior knowledge can be linked to the current knowledge at university (Schmulian & Coetzee, 2011:13).

The university under study also practices the same admission policies and criteria as other institutions of higher learning. The admission for any faculty focuses on the subject done at high school and percentage obtained. In order that admission policies and criteria become effective, guidance and additional academic support need to be given to students at the early stages of university opening before students find themselves in a critical stage of who to ask or where to get assistance. Early academic support and referral to the relevant department, such as financial aid department, or/and their personal mentors, should be done timeously so that new arrivals are well informed. This is normally done at university through the process of planned orientation.

6.3.5 Theme 5: Academic interventions to improve academic performance

Institutions of higher learning should provide academic support mechanisms that are considered effective in familiarising students with the university environment. In addition, lecturers are expected to play a major role in assisting and encouraging students to learn as much as they should. Lecturers should emphasise the importance of attending lectures regularly and on time so that students can derive proper knowledge of the content being studied. Furthermore, lecturers are also expected to show students how marks are calculated, what the assessment criteria are and what the passing rates are. The reception of new arrivals at lecture level and even at office must be cordial.

Lecturers again are expected to refer students who are vulnerable to the relevant support systems within the institution such as the Wellness Centres, Financial Aid Offices, the library and the administrative offices. It is important that at-risk students

(academically weak students) need to be referred at the early stage to academic support programmes in order to make sure that their confidence is maintained for their future academic success. It must be noted that students' success depends on proper and effective guidance towards the existing academic programmes that are in place and modifying them the way that students will benefit and improve their results. Therefore, institutions need to check and reinforce the effectiveness of the existing programmes to make sure that they serve the purpose they are meant to achieve.

Another intervention strategy is the implementation of the Supplementary Instruction also referred to as SI. This is the managerial programme established to assist students with extra learning periods. The results obtained in this study indicate that students generally are not happy about the intervention because they feel that SI leaders are not efficient enough to conduct the lessons they offer. Rather, students prefer the introduction of extra lectures conducted by the lecturers. Other programmes being offered to supplement intervention strategies are mentorship, counselling, and bridging and pre-English classes. The data from students highlighted that some of the programmes (especially the SI) are not as effective as they are supposed to be towards students' academic performance. The unfortunate part was that the findings revealed disparity from lecturers and students.

6.4 CONCLUSION

This chapter presented the findings in a summarised version. The researcher combined the sub-themes under one theme and proved the researcher version as per theme. Based on the findings, the model to improve Accounting performance at the first year of study was developed and presented. The next and final chapter attempts to answer research questions followed by a proposed strategic guide to address the failure rate of first-year Accounting students at a university of technology. The chapter concludes the proposed recommendations for further study. The limitations experienced in this study is highlighted.

CHAPTER 7

SUMMARY, CONCLUSION, RECOMMENDATIONS AND MODEL

7.1 INTRODUCTION

This study investigates poor academic performance of first-year Accounting students at a university of technology in South Africa. This chapter commences with the research discussion and interpretation of the empirical findings comprising findings from literature, findings from the questionnaire and findings from the interview. The relationship between the current research theory and findings were highlighted. It is in this chapter that the researcher establishes whether the data collected and analysed addressed the research problem and answered the research questions of this study.

The chapter also confirms whether the research problem is addressed and research aims are attained. The literature and themes as summarised in this chapter address the above-mentioned problem, questions and objectives. The empirical findings were set out according to the themes and categories as outlined and discussed in Chapter 5. This chapter also outlines how the research questions have been answered by the study.

7.2 FINDINGS FROM LITERATURE

Findings from the literature study have shown that it is imperative for students to take part in their own learning and embark on acquisition of academic skills that would empower them to become academically successful. The following findings have been identified from the literature and are discussed below:

- Students' motivation;
- Adjustment to university life;
- Class environment and instructional approaches;
- Barriers to academic performance; and
- Academic interventions to improve academic performance.

7.2.1 Student motivation

- The interest shown by students in a course plays an important role in individual educational performance. Students' learning and acquiring of knowledge are mostly influenced by the level of motivation that the student possesses. Successes or failures are critically influenced by the level of interest or passion one has towards the task and goals set (cf. 3.2.3.3).

- Literature shows that a combination of intrinsic, extrinsic and goal-oriented motivation drive the majority of students to attain academic excellence (cf. 3.2.3.3).

7.2.2 Adjustment to university life

- Literature also affirms that the transition from high school to university imposes a lot of stress due to unexpected circumstances, such as adjusting to the new environment. For example, campus life itself, being on their own and development of self-efficacy as well as strict timetables and schedules are stress factors affecting students' performance (cf. 3.2.5).

- First-year students are exposed to the institution's culture, regulations, policies, and structures which become unfamiliar challenges compared to their previous experiences at school level. This situation overwhelms them and requires immediate adjustment (cf. 3.2.5).

- The complexity and hostility of the university environment affects students psychologically, socially and academically. Therefore, first-year arrivals take time to socialise and acclimatise to the entire environment (cf. 3.2.5).

- Adjustment is all about an attempt to bring about harmony between the demands and needs of the individual and his or her new environment. Therefore, mastery of these demands and needs are necessary for effective learning (cf. 3.2.5).

7.2.3 Class environment and learning approaches

- Literature also indicates that the class environment needs to be conducive to learning. In other words, all the stakeholders should be prepared, arrive on time for lectures and communicate positively. There must be an understanding between the students and the lecturer as well as between the students themselves. Engagement in the process of learning allows students to draw some of the information gained from previous experiences and align content with life experiences. This implies that when students are deeply engaged in learning, reflection is attained. The most effective approach to effective learning is when students participate and work together within groups to grasp and allow multiple perspectives on the content and representation of reality. Therefore, it is through the process of information sharing and discussion that personal appreciation and cultural differences among students develops (cf. 2.3.1.3).

- Literature also confirms that constructivist classroom activities enable students to become lifelong learners. Within this type of classroom instructions are created with considerations of students' experiences and background of the subject. Consequently, students use the foundation of the previous knowledge to construct understanding and thus apply the theory of scaffolding. This also presents an opportunity to students to make meaningful contributions in sharing information and learning from each other (cf. 2.3.1.4).

- Literature also insists that learning styles which refer to the way individuals perceive and process information can have considerable impact on the learning process in that students adopt consistent preference for a particular learning style presented in the learning process (cf. 2.6).

- On the same note, literature provides that learning approaches involve the ways in which students relate to a learning task, conceptualise and interpret content with the help, guidance and interaction with peers and lecturers. Learning approaches thus involve the attainment and alteration or adjustment of knowledge, skills, strategies, beliefs, attitudes and behaviours (cf. 2.7).

7.2.4 Barriers to academic performance

- Literature also points out that English as a language of instruction can have negative implications for students if such students possess only BICS (Basic Interpersonal Communication Skills) and lack the ability to initiate the services of CALP (Cognitive Academic Language Proficiency). For example, students whose first language is not English, have to first transfer the content for interpretation into his/her mother tongue before providing or expressing himself/herself content-wise. Therefore, it is imperative for students to be fluent in academic English as used in classrooms in order to succeed academically (cf. 2.9.1).

- Students who are proficient in English, but who lack problem-solving skills still find it difficult to perform as expected in Accounting. In a sense therefore, it is argued that students who possess problem-solving skills and are also proficient in English are more likely to succeed in Accounting because they possess academic dimensions (CALP) of the language of instruction (cf. 2.9.1).

- It is also noted in literature that subject background, knowledge and the grade percentage obtained previously (at school level) are significant factors that determine the student's academic future (cf. 2.9.2).

- The influence of Mathematics, which is the extent to which a student is literate in Mathematics plays an important part in such a student working Accounting notations quickly. Therefore, evidence exists that Mathematical knowledge contributes positively towards Accounting performance (cf. 2.9.3).

- Macgregor (2007:1) and Nnamani *et al*., (2014: 88) are of the opinion that financial constraints impact negatively on the student whose socio-economic status is poor. This is so because excessive amounts of tuition fees, application fees and registration fees make it difficult for students from lower socio-economic households to perform well academically. Schoeman (2015:172) adds the issue of transport for those students residing away from campuses. These students

have to pay for accommodation (rent, water and electricity) which have become very expensive in South Africa.

7.2.5 Academic interventions to improve academic performance

Support programmes

Providing students with access to university, whilst being necessary is not sufficient to ensure academic success. This also means that universities must devise a means to increase pass rates. At risk programmes are necessary and if implemented properly and effectively can change the low pass rates to higher pass rates. Several intervention strategies are recognised at various institutions and include the following:

- **Orientation programmes**: These are programmes designed to orientate or familiarise the new arrivals with the contents of the subject, the environment and other relationships (procedures, vision, rules and regulations) in the campuses (cf. 3.2.4.3).

- **Bridging**: These are institutional programmes developed to assist students who are lacking in a specific area related to the programme being undertaken. For example, first-year Accounting students could be expected to enrol for a maximum of three subjects in the programme for which these subjects will be credited when all are passed (cf. 3.2.4.4).

- **Mentoring**: These are experienced individuals who share knowledge, experiences and have a high degree of specialised command of the subject matter and can give advice to a less experienced, and who is also modelling the mentee to master the subject (cf. 3.2.4.5).

- **Supplementary instruction**: This refers to those students who normally are selected to assist students' one step below his or her level of study. They have acquired notable knowledge in the subject (cf. 3.2.4.6).

- **E-Learning Technology**: This refers to the computerised teaching and learning programmes designed to advance both students and lecturers in the use of technology and media communication as contemporary tools for teaching and learning (cf. 3.2.4.7).

7.3 FINDINGS FROM EMPIRICAL STUDY

7.3.1 Questionnaire for students

The findings gathered by means of questionnaires from students for this study reveals the following as per study themes and sub-themes:

Theme 1: Students' motivation

- The students feel that they do not get support from the lecturers to do well in Accounting hence they fail. Lack of support from the lecturers is thus a contributing factor to students' academic performance. However, opportunities available in the labour market upon completion of the qualification motivated students to keep on enrolling irrespective of challenges (cf. 5.4.1.1).

- Students have the perception that once they have acquired knowledge of, and graduated in the field of Accounting, there is a high probability that employment is at hand. Some examples of employment put forward were Accounting Clerk, Bookkeeper, Chartered Accountant and Internal audit manager (cf. 5.4.1.2).

- Students are attracted to the Accounting profession because they heard other people saying that once an individual has graduated from the Accounting discipline the salary is appealing. Therefore, they commented that the salary they hope to earn within the Accounting sector is a driving force for their continued enrolment for Accounting, regardless of the continuous disappointments (cf. 5.4.1.2).

- Students' ability to pass Accounting rests with not only passion for the subject but also commitment and regular practice. When these approaches are employed (passion, commitment and practice) it is guaranteed that academic success will become a reality (cf. 5.4.1.3).

- The analytical nature of Accounting allows students to use high-order cognitive skills in order to construct long-term understanding. Students further confirmed that Accounting challenges them to have a clear understanding of the logic behind calculations of transactions and certain percentages (cf. 5.4.1.4).

- Analytical and ethical principles of Accounting motivate students to be organised and to be honest in everything they do that is related to financial activities. Rules and procedures are followed in calculating and recording of the transactions (cf. 5.4.1.4).

Theme 2: Student adjustment to university life

- Time management was mentioned as an obstacle towards students' academic performance. Spending more time on extramural activities instead of academic work created problems. Further, concentrating on certain subjects and ignoring others are the result of being unable to allocate time properly for all subjects that students are enrolled for (cf. 5.4.2.1).

- Postponement of studying till the eve of the test or exam is also a sign of lack of time management (cf. 5.4.2.1).

- The university workload; schedules between subjects, subject clashes, tests, and assignments are factors that make students unable to cope with the academic workload (cf. 5.4.3.1).

- The workload at university is greater than the high school workload. At university students sometimes write more than two tests per day and lectures do not allow

the students much free time during the day. They sometimes have to attend many lectures in a day (cf. 5.4.3.1).

- Failure to attend classes results in students missing out on valuable knowledge, information and advice that are not documented anywhere else (cf. 5.4.4.1).

Theme 3: Class environment and learning approaches

- Large classes impose challenges for participation (cf. 5.4.3.1). Not everyone is able to participate in a large class. Lecturers also are not in a position to attend to each and every individual (lack of individual attention) in a large class.

- Group work would enable lecturers to work with fewer students from a group of at least five students per group. Within group work relevant information and knowledge can be shared (cf. 5.4.3.2). Group work strengthens team spirit.

- Involvement and participation in the day to day learning is a key to solving high failure rate in Accounting (cf. 5.4.3.3).

Theme 4: Barriers to academic performance

- Participants revealed mixed feelings towards English as their academic language. Majority of students disregard the relationship between academic language used at the university and their poor academic performance in Accounting, while others acknowledged that lack of efficiency in English language created some challenges for them (cf. 5.4.4.1).

- Some students lack proficiency in English and do not understand the meaning of Accounting terms. As a result, they also fail to understand the questions relating to these terms in assessments (cf. 5.4.4.1).

- Inconsistency in the level of English used at high school as compared to university created problems for certain students. Therefore, some participants viewed the subject to be pitched too high for their understanding (cf. 5.4.4.4.1).

- Some students are afraid or even shy to participate in the classrooms because they feel that they cannot express themselves efficiently in the English language (cf. 5.4.4.1).

- Adoption of the language of instruction at the university, compared to their previous language of learning at high schools posed a challenge to some students' academic performance (cf. 5.4.4.1).

- Basic Mathematics enables students to deal with the mathematical aspects of Accounting. Mathematical background enables students to apply mathematical rules and procedures when dealing with Accounting activities (cf. 5.4.4.2).

- Mathematical background enables students to calculate quickly, accurately and improves the speed in handling accounting transactions (cf. 5.4.4.2).

- Most participants are generally in dire need of finances for their studies. Inability to pay for tuition, buying of books and other academic resources and the emotional stress accompanying such financial need seems to have an influence on their academic performance (cf. 5.4.4.3).

- Financial constraints impacted negatively on students' daily travelling to campus. Sometimes it becomes tough for families to support them financially, considering students' home backgrounds (cf. 5.4.4.3).

Theme 5: Academic interventions to improve academic performance

- Two lectures per week for Accounting is not sufficient for students to grasp the subject content that is expected to be mastered at the first-year level. The Accounting periods are not enough for extra activities (cf. 5.4.5.1).

- It is noted that various intervention strategies are in place in this particular institution where this study took place but students are not entirely interested in making use of these interventions to their benefit (cf. 5.4.5.2).

- Students have also complained that student instructors are not qualified or committed enough to present the secondary instruction classes. These classes are also sometimes presented late in the afternoons which means that some students will not be motivated enough to attend (cf. 5.4.5.2).

- Other students consider these secondary instruction classes such as SI sessions very beneficial towards their success. They confirmed that from these interventions they find simplified versions of the subject content and also clarification (cf. 5.4.5.2).

6.3.2 Interviews for lecturers

The findings from interviews with lecturers who participated in this study reveal the following.

Theme 1: Students' motivation

- Lecturers claimed that lack of commitment from students is a challenge in the Higher Education context. Students do not attend classes and do not do their work and this affects their academic performance (cf. 5.4.1.1).

- During admission the institution fails to attract excellent students who are capable of handling the subject matter and its challenges. It seems that the students who are selected lack adequate knowledge of the subject and the ability to cope with the workload at university level (cf. 5.4.1.1).

- Students are not academically prepared for the university workload. The situation ends up frustrating the same students who ought to then repeat the same course, sometimes several times (cf. 5.4.1.1).

- Students have a perception that they will earn a lot of money and make a better life for themselves. This requires students to possess characteristics like hard work, dedication, self-efficacy, self-expression for job requirements (cf. 5.4.1.2).

Theme 2: Students' adjustment to university life

- The majority of students reside far from campus which causes them to miss classes. Sometimes they arrive late for classes. This results in students missing out on critical information and some clarification on certain concepts that are building blocks on the entire topic (cf. 5.4.2.1).

- At secondary schools, topics were repeated several times while at university students do not get the opportunity to cover the work several times. Students struggle to align with the way things are done at university in comparison to high schools (cf. 5.4.2.2).

- Students who repeat the subject do not attend classes. They perceive themselves to be knowledgeable of the subject matter. Irregular attendance of classes further impacts negatively on students' academic performance (cf. 5.4.2.3).

Theme 3: Class environment and learning approaches

- Large classes impact negatively on effective teaching and learning and also hinders the opportunity to build healthy relationships for both lecturers and students (cf. 5.4.3.1).

- Classes need to be divided to be smaller in number per class, to enable effective interaction during teaching and learning (cf. 5.4.3.1).

- Knowledge is not built by individual learners but rather by the broader social context. Learning is a social and collaborative activity where people create meaning through interaction with one another (cf. 5.4.3.2).

- Participation and interaction with others in class and students taking part in their studies has a positive effect on academic performance. Students' success depends entirely on a lot of revising of Accounting examples which cannot be memorised (cf. 5.4.3.3).

Theme 4: The barriers to academic performance

- Students' limited knowledge of English hampers clear understanding and good interpretation of the core concepts of the subject (cf. 5.4.4.1).

- Students who have done Mathematics at high school perform better in Accounting at the first-year level. Students who have done Mathematics at high school show logical answering and reasoning of the final answers (cf. 5.4.4.2).

- Students from poor families lack some academic resources and this hampers their academic performance (cf. 5.4.4.3).

- It is clear that prior knowledge gives students an advantage compared to those who do not have prior knowledge in Accounting. The knowledge they have acquired in high school becomes the foundation of the first-year content. Prior knowledge and prior achievement are the variables in explaining first-year Accounting performance (cf. 5.4.4.3).

Theme 5: Academic interventions to improve academic performance

- Lecturer participants are of the view that if students are not adhering to the existing institutional interventions they will still not attend any additional classes even if those extra classes can be arranged for them. Students are just unprepared for their studies. However, common knowledge says repetition brings understanding. When concepts are repeated several times it becomes easier to conceptualise (cf. 5.4.5.1).

7.4 RECOMMENDATIONS

Based on the empirical research findings of this study and participants' views on poor Accounting performance of first-year students at a university of technology, the researcher made the following recommendations against the background of the data obtained from the literature study, questionnaires collected from student participants and also through interviews with lecturers. It is important to keep in mind that these recommendations should be read in conjunction with the addition to the body of knowledge this study makes later on in this chapter.

- The researcher recommends that students need to be motivated, e.g. senior students engaging in order to improve their academic performance and assist them with basic Accounting principles and concepts. Referral to mentorship.

- It is therefore recommended that lecturers should try by all means to support their students during the lecture with information and some explanations that would assist them to pass and be able to become what they want to be in the future.

- Inviting specialists in from the Accounting industry to reiterate the ethical issues of Accounting and good Accounting conduct would further increase the love and understanding of Accounting by majority of students and will produce future qualified individuals with high integrity.

- It was found during the empirical research that there are two periods for Accounting per week. It is recommended that more Accounting lectures are allocated where students will be able to go through previous question papers and revise the work that was covered in class. It is common knowledge that repetition brings understanding.

- The institution should try to allocate extra classes for Accounting within the main timetable, whereby previous question papers will be discussed with the facilitator (tutorial manager).

- The departments should employ an administrator to assist in making sure that students have done a certain number of tutorials per week and that those tutorials were corrected with students during their tutorial class. There should be somebody responsible for tutorials working closely with the administrator. The administrator should record all the tutorial marks for students and that should serve as continuous marks that would be added to the official tests before students could write exams.

- The study would recommend work integrated learning for students that would expose them to learnership or apprenticeship training that would also equip them with necessary skills towards their future endeavours.

- It is clear that students are not interested in some of the academic interventions introduced at the institution. Their complaints are based on SI competencies and the time slots for those interventions. It is therefore recommended that students need to be continuously encouraged because those interventions are for the benefit of the same students to improve their academic performance. The institution could also take steps to address the concerns of the students around the calibre of student instructors and the timetabling of the secondary instruction sessions. This may help to motivate students to attend and therefore improve performance in Accounting.

- Academic interventions in students' learning processes should be controlled. This means that programmes need to be evaluated on a continuous and regular basis. In addition, the way facilitators supervise, guide and control the learning process needs to be monitored. Various monitoring strategies such as accuracy in facilitating, handling students' queries and giving immediate feedback are effective intervention strategies to improve academic performance.

- Facilitators who are placed for Supplemental Instructions should be groomed in such a way that they acquire the required content knowledge before they are

placed in classes. The necessity for content knowledge and skill application for a specific subject is a vital requirement for successful performance.

- Lecturers also need to practice different learning approaches. This could add more to knowledge acquisition by students who can also learn through these various approaches. Consequently, facilitators could also apply it during the intervention sessions.

- Students were adamant that extra lectures or tutorial interventions could give them an opportunity to make presentations and thus learn from each other. By implication therefore, this means that extra classes would cater for those vulnerable or at-risk students. The earlier this type of intervention strategy is delivered, the greater the likelihood that students could improve their results.

- Institutions should deal with issues around late registration because students miss critical first units of the module by not being in class when lectures commence. The institution could be more proactive when registering students on-line.

7.5 SUMMARY OF THE FINDINGS AND THE STUDY CONCLUSIONS

A detailed literature review for this study was discussed regarding poor academic performance of first-year Accounting students. Consequently, factors contributing towards poor academic performance at the first-year level of study were addressed in Chapters 2 and 3. This was also summarised in section 6.2 in chapter. The decisive summary and the study conclusions are therefore outlined in accordance with the following research questions which directed the study:

The following section indicates how the research questions were addressed by this study.

- Which cognitive theories underpin the teaching and learning of a subject such as Accounting?

- Which learning styles and approaches are relevant for academic success in first year Accounting?
- Which factors contribute to poor academic performance amongst first year Accounting students?
- What are the institutional intervention mechanisms in place to improve academic performance of first year Accounting students?
- What should a strategy guide to assist first year Accounting students include?

7.5.1 Research question 1

- Which theories underpin the teaching and learning of a subject such as Accounting?

This research question was addressed through the literature study presented in Chapter 2. The following major aspects relate to this question.

Critical Emancipatory Research plays a major role within research as it is both participatory and collaborative in nature. In the context of this study, the researcher understands the implications and the direct effects of the application of CER with regard to first year Accounting students. The application of the CER seeks to address the academic problems of students and to find collaborative solutions to such problems. Constructivism theory encourages students to become creators of their own knowledge by linking their experiences with new information presented in the lecture room. Cognitive learning theories were also addressed and their positive influence on students' academic performance were elaborated on.

7.5.2 Research question 2

- Which learning styles and approaches are relevant for academic success in first year Accounting?

The main concerns of this study are the high failure rate of first-year Accounting students and progression strategies from first-year to the next level. Therefore, the faculty through its lecturers, need to enhance lecturing strategies, students learning environment, empowering students by teaching them “how to learn” (Jones, Reichard & Mokhtari, 2003:368). On the other hand, students bring in different learning styles which need to be understood and adhered to by lecturers in order to engage every student in a class, even though it becomes difficult to accommodate all students as they each have varying learning strategies (Tulbure, 2012: 398; Liu & He, 2014: 734). According to research, students perform academically well once their learning style is well matched with the learning environments and they also enjoy various learning styles (Abidin, Rezaee, Abdullah & Singh, 2011:143). Therefore, what is most important about students’ performance is how the material is presented, not necessarily what is being lectured. Considering the importance of presentation, lecturers should be encouraged to make an analysis of students’ learning differences and needs aligning their lecturing with the learning style and learning style model, as discussed in Chapter 2, section 2.6, Figure 2.1 and 2.2 respectively. The educational process for both students and lecturers would be improved and there would be a possibility of students achieving academically.

Apart from the learning styles discussed in Chapter 2 and briefly discussed above, there are learning approaches that students normally use to acquire subject knowledge effectively. Deep learning approach, surface learning approach, problem-based learning and strategic learning approach are all important in the teaching and learning process of first-year Accounting students. All the mentioned approaches are discussed in Chapter 2 as an illustration of how they could enhance students’ academic performance. These approaches are not discussed here again.

7.5.3 Research question 3

- Which factors contribute to poor academic performance amongst first year Accounting students?

Factors contributing to poor academic performance amongst first-year Accounting students are many and varied. These are discussed in 3 as well as in Chapter 5. Those

persuasive critical factors that were found during the data collection, data analysis and data interpretations were discussed under the following headings:

Students' motivation

Data from open-ended questionnaires and interviews revealed that most students take Accounting as a subject even though they have failed once or even several times. It is established that students are not just taking the course because it is available; rather they are taking it because of predominant motives. Some students take Accounting because they have done a career search before registering for any qualification and are adamant that they are studying Accounting because they are aware that there is a need for Accounting professionals in the labour market (cf. 5.4.1.1).

Even though students find Accounting motivating and paving the way for their future careers, students reported that they do not receive much support from their lecturers and not enough motivation as could be expected from them. Furthermore' students complain that their lecturers are calling them by names.

Adjustment to university life

The findings from both interviews and open-ended questions in the form of questionnaires established that first-year students take a longer time before they adapt to the new university environment. According to the research findings, it is clear that university routine is a completely new way of doing things according to newcomers (cf. 5.4.2). Additionally, it is established that first-year students lack time management as they are often late for lectures, or miss classes which leads to them missing important information (cf. 5.4.2.1).

Class environment and instructional approaches

The data in this study revealed that the classroom environment is not conducive to allow lecturers to have close contact with students. Class structures do not allow formation of smaller groups within a class which would enable the lecturer to go around while learners are doing work together and assist them where needed. It is further highlighted that a large number of students per class impacts teaching and learning because it is impossible for a lecturer to reach everyone in class simultaneously. The

findings also emphasised that when students are not given a chance to make a presentation it becomes difficult for them to learn effectively (cf. 5.4.3).

Barriers of first year Accounting students

The study revealed that the factors which mostly contribute to poor performance by first-year Accounting students were stated as barriers, namely, English barrier where English is the medium of instruction at the university, mathematical barrier, financial barrier, home environment factor, students' prior knowledge, percentage obtained previously and students' experience from high school (cf. 5.4.4). However, majority of students disregard any relationship between English and poor performance in Accounting, rather the procedural Accounting content that is posing a challenge to their academic performance. Only few students indicated that English poses a challenge to their understanding of Accounting (cf. 5.4.4.1).

7.5.4 Research question 4

- What are the institutional intervention mechanisms in place to improve academic performance of first year Accounting students?

This research question is answered in both Chapter 3 and 5. Under the banner of the Academic Development and Support unit for the entire university, each campus has a dedicated student support unit depending on the highest priority of the campus towards academic success and wellbeing. The intervention mechanisms that the institution has put in place to assist the first- year students has been dedicated in the academic development and support unit with the purpose of improving students' performance.

The unit is considered to be the students' support service unit for the holistic welfare of the students within the institution. The academic development support has put in place effective programmes for first-years such as mentorship, supplemental instructions, reading lab, wellness and counselling, my academic performance plan whereby students are assisted with methods of reading and studying skills in the writing centres. The institution aims at translating the above- mentioned interventions into students' retention and success because they appeal to "how-to-learn and what-

to-learn". From the sessions students are expected to set their own academic goals and accept responsibility for their learning and performance.

The academic development unit for both campuses caters for students' academic needs as well as welfare. Students are expected to make use of the above mentioned programmes as introduced by the institution to assist them in their academic performance and their wellbeing within an institution. However, it seems that students do utilise some of the above-mentioned programmes. Student participants were more interested in supplemental instruction, mentorship and language proficiency (cf. 5.4.5).

Another intervention that students seem to be longing for is to be exposed to industry through work integrated learning (WIL). There are faculty officers who are assisting students to find placement. However, Accounting students are still struggling because there are not many Accounting firms that are prepared to host students for work exposure. Work-integrated learning enables students to put into practice the theory they have learned in the class and enables them to develop the skills required in the labour market after their graduation.

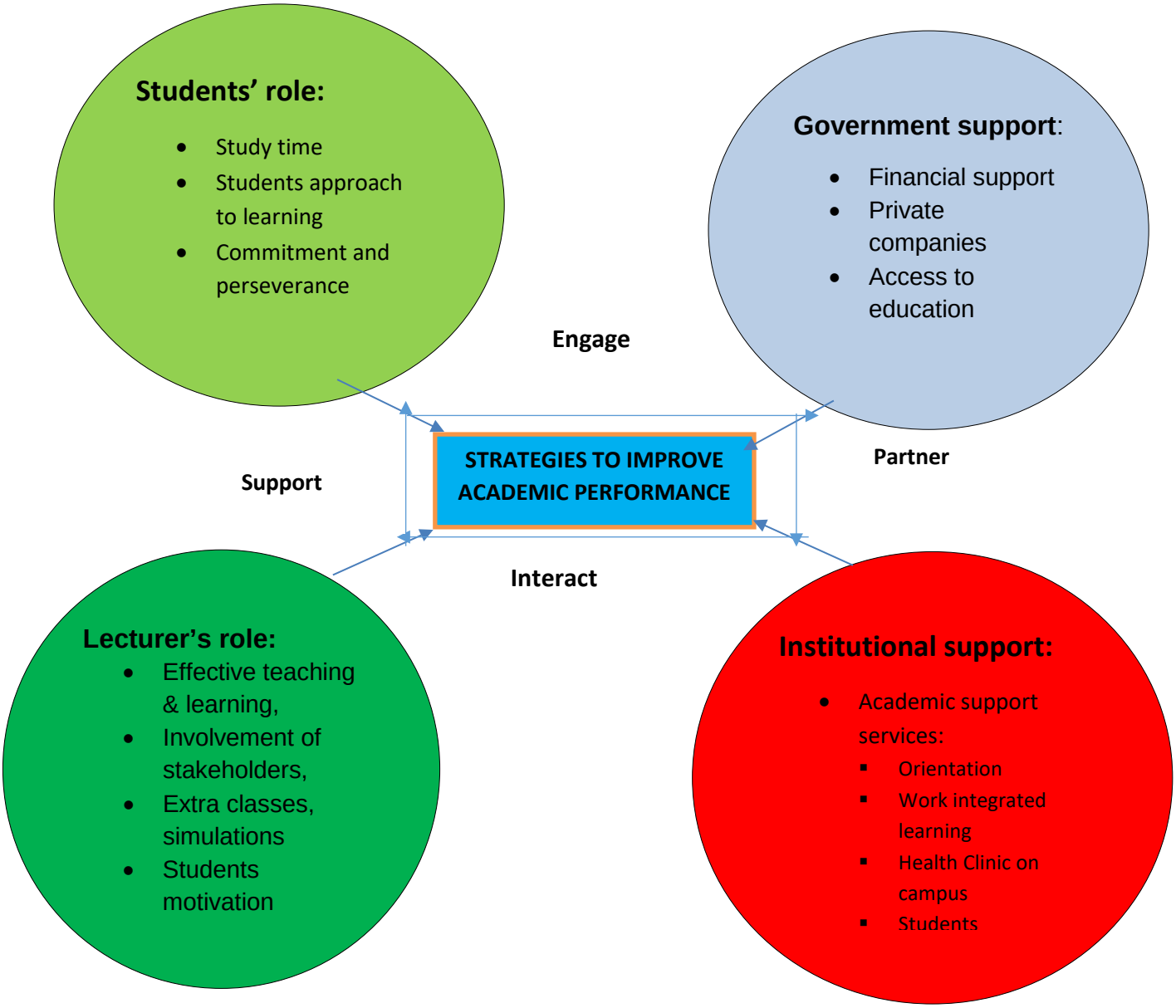
7.5.5 Research question 5

This research question is answered with the addition to the body of knowledge as provided next.

- What should a strategy guide model to assist first year Accounting students include?

7.6 ADDITION TO THE BODY OF KNOWLEDGE: STRATEGY GUIDE MODEL

Figure 7.1: Strategy Guide model



The aim of the model is to improve academic performance of first year Accounting students. It is crucial for all education stakeholders to work hand in hand for the improvement of the academic performance of students. Relevant support and resources needs to be in place to make sure that the goals of education are effectively achieved. The model proposed the linkages as illustrated in Figure 6.1 as means of connection to all role players in education. The links are: engage, partner, interaction and support.

Engage: For the improvement of academic performance there should be engagement among role players of education to get involved and work towards the improvement of education. To ensure that every role player knows and understands the part they have to play in order to improve academic performance.

Partner: For the benefits of students' academic growth and success the institution (university) should take a lead in initiating partnership with the Accounting firms to take students for work integrated learning. Establishment of this type of partnership would broaden the knowledge horizon of students.

Interact: The institution (university) with its management and other role players within the institution should make sure that there is collaboration amongst the lecturers and students on the different campuses (multi-campus universities). Uniformity is recommended from both campuses on any new programme. That would eliminate the feeling that students from other campuses are not served or provided with the quality education they deserve. Interaction should be a continuous process between the departmental management and lecturers to ensure that academic performance takes priority.

Support: Role players are expected to support each other to ensure quality education. It is Government's responsibility to ensure that institutions receive the financial and other logistics and education support they need, and partner with the private sectors. Immediate support should be provided by the institution to lecturers and students to ensure that teaching and learning receive the highest priority for the improvement of academic achievement.

From all the above links, every education role player is responsible for academic achievement. However, the institution (university) should take a leading role to ensure that teaching and learning receive academic support to improve academic performance of every student.

7.6.1 Institutional Support: Academic Support

Figure 6.1 presents orientation, work integrated learning, health clinic on campus, and student accommodation as recommendations to support academic performance.

- **Orientation**

The study recommends that the institution should prioritise the welcoming of students and celebrate, support and eventually integrate the first-year students upon their arrival at the university. Welcoming first-years will minimise absenteeism because they were not properly acclimatised to the university environment, especially with regard to venues and timetable matters.

It is critical to set aside at least two days prior to the official opening of the university for the first-years, to ensure that they are familiarized with the environment and the processes and procedures at the university. The two days would ensure that students are introduced to buildings, computer laboratories, library skills, classes, and interact with student advisors and lecturers. In general orientation helps alleviate separation anxiety which first-year students experience when they leave their home environment.

During the incorporation process students will be able to interact amongst themselves and also with the faculty. Furthermore, students can be made aware of time management, academic centres where they can get help, such as reading labs, tutoring, technology support, counselling, campus facilities such as the bookshop and cafeteria. During the orientation they will have opportunity to ask questions and be informed on what is expected of them.

- **Health talk (Health clinic and Wellness centres on campus)**

It is critical to inform students of the myriad of health matters which may affect them. Having a health centre will assist in advising students on health issues by professional personnel. Students need to be made conscious of health facilities and know how to access them.

Awareness about drug/alcohol and sexual assault is imperative because sometimes students do not attend classes because of related health issues and even drop out of university. It is advisable for the university to make sure that health talks take place during the orientation session. First-years are very vulnerable during their first few months at university, so it is critical to engage with them on health issues.

In general, orientation prepares first-years for academic life and assists them with transition to the university. With effective and well planned orientation first-years will not have as many challenges as they would encounter without proper orientation. It would be easy for them to access classes rather than waste a lot of time before being familiar with the university environment.

- **Students' accommodation**

Students' accommodation is one of the most important necessities that institutions should consider in relation to improved academic performance. When students are safe, relaxed and properly rested, they are able to think rationally, methodologically and logically.

Students' accommodation is a very thorny issue as it involves a vast amount of money and capital to install. However, it can be assumed that students who reside on campuses stand a better chance of success compared to those who reside off campus. The results of the investigation also show that students residing off campus are subjected to noisy environments, unsafe living conditions, lack of study equipment and no electricity.

- **Work integrated learning**

Most students feel it would be appropriate to them to learn from experimentation and experience. This demand can be satisfied by placing students in companies that operate as Accounting firms. In practice, this would place students on the path of integrated learning as an exposure to the world of industry. The benefits of work

exposure are the relating of content to the actual practice, acquisition of knowledge as well as gaining experience most needed in the world of work.

7.6.2 Government Support

- **Financial support**

It is critical for the government to create a situation whereby higher education is affordable for all levels of students in South Africa despite students' economic background. Special priority should be given to provinces like the Free State where poverty is at its highest toll. There is a high unemployment rate and people around the area live with minimal economic resources, following the departure of giant mining companies in the area. It is government's responsibility to increase financial support which would minimise registration fees, academic resources and fund university accommodation facilities. The provision of these basic factors will most likely improve the Accounting pass rate of the first-year students, as the above suggested by the researcher will be taken care of by government. On the other hand the researcher encourages the beneficiaries (private sectors) of the graduates to also play a part in the assistance of students.

- **Private companies' interventions**

Private companies should take responsibility of investing in students' education because at the end these companies will benefit from the skills and knowledge that students have acquired at university. This act of social responsibility will lessen the burden placed on students and government. Private companies could provide bursaries and introduce mentorship programmes whereby mentors are given a stipend by those firms while they are mentoring the first-year students.

- **Access to education**

In reality access to education is a universal international right for students whereby higher education can be accessed. It recommended that government together with the

businesses should introduce affordable education. As suggested from the above sub-topic the financial investment should minimise the high fees. Furthermore, accommodation for those who are needy should be provided at lower costs. Consequently, there should be debate on higher institution access by all South Africans.

- **Language of instruction**

Language is one of the various symbol systems that develop through social interaction within a particular culture and the student inherits language as a member of that culture. As a consequence, the background and culture of the student should be taken into consideration throughout the learning process, as they form part of the presage factors. The influence of language of instruction on the learning process is immense. This means that the knowledge the student constructs, detects and acquires during the learning process could affect their comprehension and interpretation of the subject concept.

For example, the former Afrikaans universities that taught students in their mother tongue (Afrikaans) produced the learning process that was successful, simply because the language of instruction was the mother tongue. The implication could mean that students who are taught in the language other than the mother tongue will experience problems in learning and thus underperform. For example, students that were taught in Afrikaans at pre-tertiary level could find it difficult to switch from Afrikaans to English because they first have to learn English before they could get to understand the subject content.

7.6.3 Lecturers' role

- **Number of classes (inclusion of tutorials) per week**

Accounting as a subject was found to be of great value to students as per their responses about their future endeavours. To this end, the researcher recommends more Accounting classes per week as only two sessions per week are not sufficient

for a practical subject like Accounting. The number of tests, assignments and tutorial classes should also be increased. Assistance to lecturers could be provided for in the form of administrators who could monitor the additional tutorials and assignments.

The overall exemption should be that those who obtained 75 percent or more will not write examinations, the mark considered to be the pass mark. Assignments should be planned according to the semester's curriculum. The administrator together with the lecturer must provide a clear schedule to students as to when the assignments are to be submitted. The researcher would recommend the use of the electronic blackboard for submission and time should be specified. The feedback and corrections should be given during the tutorial classes.

To ensure that value is added by assignments, there should be an evaluation every Friday to test the effectiveness of the content of assignments. To get to 75 percent proposed percentage, two assignments per week and one test should be given, this would amount to 32 assignments per semester and 16 tests. The proposed administrator should be employed permanently for the position and do as per the researchers' suggestions. Instead of having only SI's (Supplemental Instruction) who are students, preferably have somebody who can facilitate Accounting and do all the other activities as suggested above. Third-year students can be considered for the recommended positions, because they can relate to the content and use the language that students use, however work should be done as per schedule. Non-submission of assignments should disqualify a student from taking part in the particular week's test.

- **Effective teaching and learning**

It is critical that philosophy of effective teaching and learning is honoured at this particular university. The researcher recommends the development of Accounting lecturers with specific reference to other teaching methods (Augmented Reality that appeals more to the interactive) other than the lecturer centred approach. However, to bring in interesting methods of lecturing (teaching and learning for improved results), it is suggested that lecturers are continuously developed and encouraged to employ other methods of teaching that caters for all students in a class.

The exploration of varied good lecturing (teaching) strategies such as problem based learning, which caters for students' backgrounds and cultures can influence their deep approach rather than surface approach (see section 2.7). Students can learn in different and unique ways (Arends & Kilcher, 2012:42) as literature suggested in Chapter 2 (see section 2.6). On the other hand, different ways of lecturing will empower students rather than continuously employing rote learning that channel them to work for a specific industry, rather than life skills and the education that allows them to ascend out of poverty and begging to be employed.

- **Involvement of external stakeholders**

It is critical to invite personnel from different industries who are the beneficiaries of the graduates of Accounting to engage with them and make them aware of what is expected of them by those industries**.** Creation of a platform for students to interact with external people within the Accounting field might encourage them to change the behaviour of coming to class late because they will know that in the corporate world time is money, doing things incorrectly will have a cost implication to a company. This may help because they do not know the content and the ethical conduct of any individual within the field. Engagement with external stakeholders changes a students' perspective which may lead to improved results. Students' results are of interest to every stakeholder, be it accounting firms, auditing firms, government organisations, financial institutions, parents and funders.

The practical part of building that relationship between the students and the external stakeholders will tremendously improve the results as they would want to work in those firms and to be like the young graduates who work there. Through such relationships the firms might even take on some students to be trained, in that way everyone will be motivated. Results and students' motivation can be improved in different ways which might lead to improved academic performance. The invitation of external stakeholders to play a part in the learning environment could endorse high quality learning outcomes. This may motivate students even more and the engagement prepares them to work harder towards a future they understand other than an imaginary future.

- **Building students' confidence**

Students come from different backgrounds with many academic challenges. To overcome those challenges within a class room, lecturers can identify types of students and refer them to the Wellness Center where they can be assisted with academic language (language proficiency), and effective mentorship programmes. The mentorship programme should start during the first two weeks of orientation as suggested by the researcher.

It should be noted that students also have their own intelligence, personal qualities, cultural backgrounds and their respective languages all which can contribute meaningfully to the learning process if recognised by lecturers. Therefore, every acknowledgement of any small contribution makes a student feel important and that will slowly build their confidence. It is a clear indication that multilingual tutorials influence the manner in which knowledge is attained and the truth that students construct, perceive and reach during the learning process.

For example, topics like "Accounting as a system", makes them relate to systems approach in Accounting such as input, process and output towards their daily lives (culture). It will also allow them to make their own interpretations as to what they think is expected of them. They will understand the topic far better than a lecturer telling them abstract information in relation to the determination of outputs which they can determine based on the example provided to them. Simplifying the Accounting terms such as assets being their possessions, the usage being depreciation and calculations would make the subject easier and interesting and students will enjoy it and pass. It is critical not to underestimate students' intelligence.

- **Simulation**

Lecturers need to allow students to learn by doing. They should allow students to mimic the topic amongst them. If for example the topic of the week is partnerships (just a typical example), they should contribute and buy small items that they can sell and

finish within a day or two, show them how to do the recording from their own small businesses (imitations) and make proper interpretations from their own actions.

Simulation can impact positively on first-year Accounting performance. Any topic can be simulated, it depends on a lecturer's creativity and makes the topic more practical. Abstract ways of presenting topics should be avoided – bringing them to the students' context will help them to master a specific topic. Once they master it they will produce positive results.

- **Cultural games that relate to a topic**

The lecturer's role in supporting students' learning through cultural games would empower them to learn by playing. For instance, if the lecturer is teaching Cash Receipts and Payments Journal, students can play (Diketo) where they put stones in a hole and a student takes them out one by one – each is worth a certain value. As they play they have an intention of buying some business stock and paying for business expenses. Along the way the lecturer adds more information which will be related to the Cash Receipts and Payments Journal. This would teach the owner about withdrawing money from the bank and addressing business needs.

- **Accounting equation**

This type of game allows students to see the simplicity of the Accounting equation which is a core concept in Accounting. It will be representing the bank, money will be decreasing on the one hand and on the other hand stock would be increasing because the business owner (some students within the same group) would be buying some items for the business. This will emphasise simulation but it would be a cultural game. Every attempt must be made to confirm that the students learn something related to the subject and the lecturer makes it more interesting.

7.6.4 Students' role in their success

As much as institutions should support first year accounting students they also need to take responsibility for their own academic success. It is critical for students to be mindful that academic achievement is not about the number of hours spent in studying but also well-managed time and tasks the student is doing.

- **Study time**

Students should manage their study times by developing schedules that stipulate appropriate time for each subject. The institutional facilities (reading labs, library and information centres etc.) that are provided for study should be utilised effectively. These facilities for learning and studying should be utilised to their full capacity.

- **Approaches to learning**

The findings from literature indicate that learning approaches such as group work, presentations, discussions, simulations form part of effective learning as far as Accounting is concerned. These learning approaches as discussed in Chapter 2 can be linked to deep learning whereby students learn to reflect, make arguments and present supporting facts.

- **Commitment and perseverance**

Students should show commitment and perseverance by adhering to study time-tables, attending lectures, consulting expert sources, and attending intervention sessions. It is of paramount importance that students commit themselves by doing and submitting completed assignments and project work and also by being on time for lectures. It is imperative to students who have realistic and well-informed expectations of higher education system.

Those types of students who possess this perception normally succeed because they know what they want and what is expected of them. Students' expectation of success

and their confidence in their abilities is positively associated with their academic performance. By implication then, this statement would mean that commitment, perseverance, expectations, perceptions and preparedness for higher education also affect how students adapt to university and cope with the new environment which can be at variance to their prior educational experiences.

7.7 RECOMMENDATION OF THE MODEL

The Department of Accounting can use the model as suggested to improve the performance of first-year Accounting students as suggested by the participants. The suggestion of the participants in this study is a sign of people who are being empowered to bring solutions to the problem of failure rate. Students and lecturers brought in a lasting and workable solution to the problem (Myende, 2014:28), (see theme 5 section 5.4.5). The researcher's contribution to new knowledge is that appropriate strategies to improve academic performance in Accounting in the first year of study can be realised by implementing a strategic guide model as suggested in Figure 6.5.

7.8 OPPORTUNITIES FOR FURTHER STUDY

On the bases of the research findings, further study is recommended in respect of the following:

- Research could be conducted with the following participants: Accounting teachers from the Further Education and Training (FET) phase, Accounting Learning Facilitators from the Department of Basic Education, participants from the Accounting industry, Accounting students and Accounting lecturers.

- Further study could incorporate all Financial Accounting 1 students regardless of their first registration date for the course.

- A similar study could be done with a change in data collection instruments – for instance focus group interviews to compare findings.

7.9 LIMITATIONS OF THE STUDY

The study excluded the rest of the first-year students who enrolled for Financial Accounting 1 for the first time in 2016. They could have possibly provided information regarding Accounting performance at first-year level. In this study, methodological variables that could be cited as limitations of the study included difficulty of access to student participation. If total access was attained, the response rate could have reached 90% to 100%.

7.10 CONCLUSION

The aim of this study was to explore a strategy guide to address poor academic performance of the first-year Accounting students. Furthermore, the study outlined the factors that may be contributing factors towards poor academic performance on first-year students. Consequently, the chapter summarised research findings, study conclusions reached, also the model was suggested to overcome the high failure rate of the first-years based on the findings as discussed in Chapter 5. In order to gather the detailed data, the researcher employed qualitative research methodology and design, whereby lecturers were interviewed and students were presented with open-ended questionnaires to provide their views on the topic under study.

The study has established that students have enrolled for Accounting because they have predominant motives. Such students are aware of the high demand of skills gap in the Accounting industry. However, they are faced with different challenges which include certain cognitive and non-cognitive factors as discussed in Chapter 2 and 3 respectively, also confirmed by participants' responses as discussed in Chapter 5.

The poor academic performance of first-year Accounting students requires the institution internal (institutional management, lecturers, students) and external stakeholders (government, private companies) to play a critical role in improving their academic performance. Taken into consideration should be students' motivation, adjustment to the new environment, academic barriers such as academic language, mathematical barriers, financial barriers and students' prior knowledge and

percentage obtained previously, class environment and instructional approaches and academic intervention.

All stakeholders need to commit in contributing and working towards improvement of quality of Accounting education and improvement of pass rate. To this end a suggested solution was proposed as intervention to control the high failure rate of the first-year Accounting students. The suggested model presented the roles each stakeholder inputs towards educational achievement.

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ANNEXURE A

LETTER TO CENTRAL UNIVERSITY OF TECHNOLOGY RESEARCH COMMITTEE REQUESTING TO CONDUCT RESEARCH

Dr Antoni Szubarga
Deputy Director: Institutional Research
AcademicPlanning
Central University of Technology
Bloemfontein
9300
Date: 12 November 2015

RE: Permission to Conduct Research Study

Dear Dr Szubarga

I hereby apply for a permission to conduct a research study at the Central University of Technology - Bloemfontein and Welkom Campuses. I am currently enrolled for a DEd in Education at the Central University of Technology, Welkom Campus. The title of the study is: **A strategy guide to address poor academic performance of first year Accounting students at a university of technology.**

I anticipate that the university will allow me to recruit participants (students who are repeating Accounting first year of National Higher Certificate in Accounting in Welkom and Bloemfontein Campuses) to participate in focus group interviews. Ten to 12 participants are required per group. All the participants will be briefed and given a consent form to sign before they commence with the interview.

If approval is granted, participants will be interviewed during their free periods. The focus group will not take more than an hour. The results of the interview with all groups will be used for the study and individual responses will remain absolutely confidential and anonymous. No costs will be incurred by the university or individual participants.

Your approval to conduct this study will be greatly appreciated. Should you require any additional information please feel free to contact me at: mmokhamp@cut.ac.za or 082 202 2512.

If the permission is granted, I would appreciate you signing on the spaces provided.

Sincerely,
Matsolo Claurina Mokhampanyane
Lecture: Business management and financial management
Department of Business management
CUT Welkom Campus

Approved by:

_____	_____	_____
Print your name and title here	Signature	Date

ANNEXURE B

PERMISSION FOR RESEARCH

Central University of Technology, Free State

ACADEMIC PLANNING

Mrs MMC Mokhampanyane

Lecturer: Business Management and Financial Management

Department of Business Management

CUT Welkom Campus

mmokhamp@cut.ac.za

PERMISSION TO CONDUCT FOCUS GROUP INTERVIEWS FOR STUDY ENTITLED "A STRATEGY GUIDE TO ADDRESS POOR ACADEMIC PERFORMANCE OF FIRST YEAR ACCOUNTING STUDENTS AT A UNIVERSITY OF TECHNOLOGY" AMONG STUDENTS WHO ARE REPEATING ACCOUNTING FIRST YEAR OF NATIONAL HIGHER CERTIFICATE IN ACCOUNTING IN WELKOM AND BLOEMFONTEIN CAMPUSES

Dear Mrs Mokhampanyane

This is to confirm that you have been granted permission to conduct focus group interviews for study entitled: **"A Strategy guide to address poor academic performance of first year Accounting students at a University of Technology"** among students who are repeating Accounting first year of National Higher Certificate in Accounting in Welkom and Bloemfontein Campuses.

The conditions of the permission are:

- The survey will not interrupt any of the official activities at the CUT;
- You will supply us with the copy of your report;
- The cost of all related activities will be covered by yourself;
- Recruitment of participants is the sole responsibility of yourself;

- Voluntary nature of the potential participant's decision to consent to participate should be strictly observed;
- You should not disclose a potential participant's decision to participate or otherwise to any other party;
- Permission does not compel, in any sense, participation of staff members or students in your survey.

DIRECTOR: ACADEMIC PLANNING

DR DM BALIA

18 NOVEMBER 2015

ANNEXURE C

LETTER TO LECTURERS REQUESTING PARTICIPATION IN RESEARCH INTERVIEW

Central University of Technology, Free State
PO Box 1881
Welkom, 9460
01 March 2016

Dear Colleague

RE: Request for assistance in the research investigation by Matsolo Mokhampanyane

Topic of study: A strategy guide to address poor academic performance of first year Accounting students at a University of Technology.

I am a Doctor of Education student enrolled at the Central University of Technology, Free State – Welkom Campus. I am involved in a research project aimed at investigating the challenges pertaining to the high failure rate of 1st year Accounting students in the National Higher Certificate: Accounting (NHC). I hereby request you to participate in an interactive interview with the researcher with regard to the above mentioned topic. I would be grateful if I could meet with you.

I hope to contact the interviews during the week of 6th to the 10th March 2016. I have at least twelve questions to ask and will probably take 45 minutes of your time. Your consideration for this request will be highly appreciated.

I will call you on Friday the 4th March 2016 to confirm your availability or you may leave a message for me using my contacts below. Thank you so much and I am looking forward to meeting with you.

Personal details

Title:	Mrs MC Mokhampanyane
Residential address:	1 Adelaar Street, Flamingo Park, Welkom
Postal address:	Box 3233 Welkom 9460
Telephone No:	057 910 3691 cell: 0822022512
E- Mail address:	mmokhamp@cut.ac.za
Promoter:	Prof Schlebusch

I have received Institutional permission to undertake the study, as well as from the Dean of the Faculty of Management Sciences. You have been selected to participate in this study because of your lecturing experience of Accounting first year (Financial Accounting 1).

All participants involved in this study will remain completely anonymous. The quality and success of this study depends largely on your assistance.

Sincerely,

Matsolo Claurina Mokhampanyane

ANNEXURE D

Lecturers Interview questions:

1. Briefly explain what could be the contributing factors towards unsuccessful attempts in Accounting as a subject in the first year of study.

2. Comment on how you as a lecturer encourages student participation in class.

3. Which teaching strategies would you employ for teaching first year Accounting students? Briefly state why these strategies are preferred.

4. What are the challenges, if any, encountered by you as an Accounting lecturer as far as teaching first year students?

5. To what extent would you say English as a language of instruction affect the progress of student performance in Accounting?

6. Which programmes are initiated by the institution to assist first year Accounting students to overcome possible barriers to academic performance?

7. What in your opinion can be done to improve the pass rate of first year Accounting students?

8. The perception is that female students perform better than male students in Accounting as a subject. State your stance with regard to this statement.

9. To what extent would you say students' mathematical background and scores influence their performance in Accounting?

10. In your opinion would you say students who have been employed in the Accounting field would do academically better than those without such practical exposure? Provide reasons for your answer.

11. In your experience as an Accounting lecturer, to what extent would say learning styles contribute to the student failure rate in Accounting?

Exit question

12. Please feel free to comment on any other aspect you may find relevant.

Thank you for your inputs.

ANNEXURE E

Student questionnaire

Topic of study: A strategy guide to improve poor academic performance of first year Accounting students at a University of Technology.

I am a Doctor of Education student enrolled at the Central University of Technology, Free State – Welkom Campus. I am involved in a research project aimed to investigate the challenges pertaining to the high failure rate of 1st year Accounting students.

You are requested to answer thirteen (13) questionnaire questions. Please provide as much information as you can.

You need not write your name on the questionnaire – you answer the questionnaire anonymously.

1. Why are you interested in the Accounting field?

_____
_____
_____
_____
_____
_____

2. What factors do you consider as important in order to enable your academic success in Accounting?

_____
_____
_____
_____
_____
_____

3. What factors do you consider may lead to potential failure in Accounting?

4. Comment on the effort put in by lecturers to involve all Accounting students in class discussion/participation.

5. To what extent would you say English as the language of instruction affects your academic performance in Accounting?

6. What do you consider to be the benefits of regular attendance of the formal Accounting lectures?

7. If you missed any formal lectures, what were your reasons?

8. Comment on how regularly you complete (on your own) all homework tasks in Accounting.

9. What, if anything, could the department/lecturers do to help improve your academic performance in Accounting?

10 What, if anything, could you do to improve your academic performance in Accounting?

11. Comment of the effectiveness of the teaching strategies used by your Accounting lecturer.

12. To what extent would you say your mathematical background and scores influenced your performance in Accounting?

Exit question

13. Please feel free to comment on any other aspect you may find relevant.

Thank you very much for your participation in this study.

ANNEXURE F

LETTER FROM LANGUAGE EDITOR

Stevens Editing and Proofreading

Charlotte Stevens: BA (English; Industrial Psychology)
Sole Trader
e-mail: ***ajc.stevens@gmail.com***

Language Editor & Proofreader **Membership:** ***PEG (SA)***
IPEd (WA)

THIS IS TO CERTIFY

That I have language edited a doctoral study on: *Poor Academic Performance of First-year Accounting Students at a University of Technology in South Africa,* for Ms MC Mokhampanyane, a doctoral student at the Central University of Technology (CUT), Welkom campus, Free State province, South Africa.

The scope of my editing comprised:

- Spelling
- Tense
- Vocabulary
- Punctuation
- Word usage
- Language and sentence structure
- Checking of in-text referencing style

My best wishes for a successful career accompany Ms Mokhampanyane.

Charlotte Stevens (Ms) ***Stevens Editing and Proofreading***
E: ***ajc.stevens@gmail.com***
October 2017